

Monicam

Photography



JANUARY 1945

25 CENTS

30 CENTS IN CANADA



FOR GOOD PICTURES

Write today for the 56-page illustrated book "Good Pictures" published by Argus to help solve your picture taking problems. Send 25c today to Argus, Incorporated, Ann Arbor, Michigan, Dept. C.

argus

Cameras and Optical Instruments



ARGUS. INCORPORATED

ANN ARBOR, MICHIGAN



Little Miss Mercury

BABIES won't stay quiet long enough to pose for pictures like this.

You've got to catch their fleeting expressions in a split second, or they'll get away from you.

You need high shutter speeds . . . and the fastest film you can get.

That's where Ansco Superpan Press comes in.

Superpan Press has unsurpassed speed . . . plus wide exposure latitude, excellent gradation characteristics and full panchromatic sensitivity.

Whether your subject is babies or basketball . . . use Superpan Press for better, more

realistic stop-action photographs. **Ansco, Binghamton, New York.** A Division of General Aniline & Film Corporation.



Ansco

(FORMERLY AGFA ANSCO)

SUPERPAN PRESS FILM

KEEP YOUR EYE ON ANSCO—
FIRST WITH THE FINEST



IGAN

Minicam Photography

TABLE OF CONTENTS FOR JANUARY, 1945



Articles

CANDID AND GAG SHOTS.....	GENE LESTER	18
VIRGINIA LEARNS TO BE A PHOTOGRAPHER.....	C. STANTON LOEBER	22
VOICE IN THE WILDERNESS.....	FREDERICK SOMMER	30
PORTRAITS BY DAYLIGHT.....	SYBIL FREED	32
SAN FRANCISCO PICTORIALISTS.....		36
WHY DIDN'T SOMEONE TELL ME?.....	RAY BARRETT	44
SO NEAR AND YET SO FAR.....	ANDREAS FEININGER	46
METAL-CHROME FOLIO.....	WM. MORTENSEN	55
LIFE IN THE FAMILY ALBUM.....	DON MOHLER	60
REUNION IN CHICAGO.....		64
LIGHT-CAMERA BRACKET.....	ANDREW M. LAVISH	74

Departments

THE LAST WORD.....	6
PHOTO DATA CLIP SHEETS.....	72
CAMERA CLUB NEWS AND IDEAS.....	83
GADGETS, KINKS AND SHORT-CUTS.....	86
NEW PRODUCTS.....	94
BOOK REVIEWS.....	108
SALONS AND EXHIBITS.....	110

Cover—SHIRLEY TEMPLE

By EARL THEISEN, Photo-Reporter for LOOK



By Virginia Loeben—see Page 22

PLEASE NOTICE

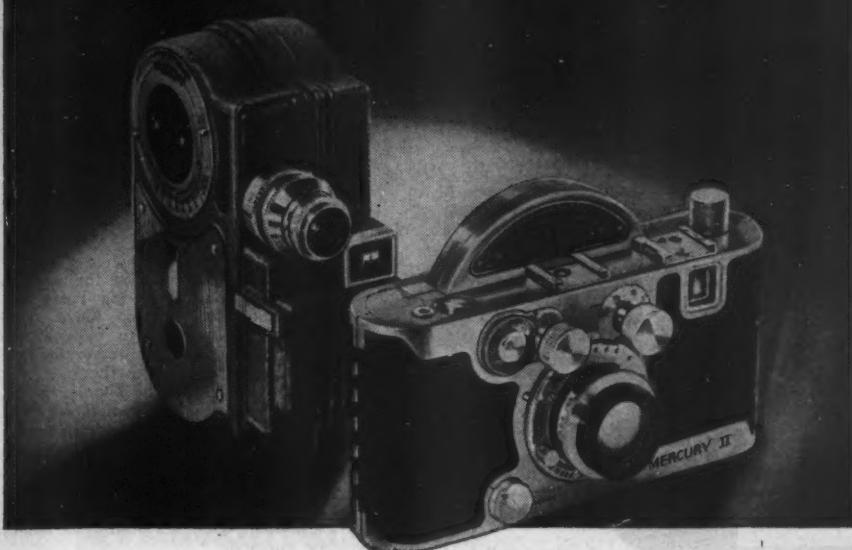
All subscriptions received prior to the combined Nov.-Dec. issue have been extended by one month.

EDITORIAL ASSOCIATES: John Hutchins, A.R.P.S., George R. Hoxie, A.P.S.A., L. Moholy-Nagy, Audrey Goldsmith, CONTRIBUTING EDITORS: Earl Theisen, Percival Wilde, A.R.P.S., Stuyvesant Peabody, A.R.P.S.-F.P.S.A. EDITORIAL SECRETARY: Agnes Reber, ART DIRECTOR: Robert Wood, BUSINESS MANAGER: Aron M. Mathies.

MINICAM PHOTOGRAPHY (TITLE REG. U. S. PAT. OFF.) PUBLISHED AT 21 E. 19th ST., CINCINNATI, O. PUBLISHED MONTHLY BY THE AUTOMOBILE DIGEST PUBLISHING CO., INC. YEARLY SUBSCRIPTION \$5.00 IN U. S. A. AND POSSESSIONS, CANADA AND COUNTRIES IN PAN-AMERICAN POSTAL UNION \$5.00 ELSEWHERE. \$1.50. SINGLE COPIES. 25c. EASTERN ADVERTISING OFFICE: EVERETT GELLERT, 35 PARK AVENUE, NEW YORK CITY, TELEPHONE LEX. 2-6145. MIDWEST ADVERTISING OFFICE: BERNARD A. ROSENTHAL, 329 N. MICHIGAN, CHICAGO, ILL. TELEPHONE FRANKLIN 7100. WEST COAST OFFICE: LOS ANGELES: 460 WEST 56 STREET, R. H. DEIBLER. ENTERED AS SECOND CLASS MATTER AT CINCINNATI, OHIO, U. S. A., MARCH 21, 1948. UNDER THE ACT OF MARCH 3, 1879. PRINTED IN U. S. A. ESTABLISHED 1937.

TWO GREAT NAMES

for the new age of color photography



Universal CINÉMASTER

The famous Cinémaster 8 mm. Movie Camera and Projector will soon be available. Thanks to Universal's wartime experience in producing precision optical instruments for the armed forces, Cinémaster will boast many important new improvements.

There will be no finer 8 mm. camera and projector on the market!

Watch for preview announcement of a complete line of Cinémaster Home Movie Equipment.

BUY THAT EXTRA WAR BOND TODAY!

Universal MERCURY II

The new MERCURY II is the world's first candid camera specially designed for the new color films. It will give you color shots that are sharp, clear and color-true in every part of the picture—both foreground and background—and do it every time. It will give you better color shots at only a fraction of the usual cost. MERCURY II will use any make of 35 mm. film in color or black-and-white, in standard cartridges. And it will be one of the fastest candid cameras ever made!

Look for the Mercury name, too, on a full line of fine precision cameras, accessories and equipment.

COLOR FILMS ARE ONLY THE BEGINNING . . . New Universal Cameras are
specially designed for surer, better, easier results with the new type films.

UNIVERSAL CAMERA CORP.

NEW YORK • CHICAGO • HOLLYWOOD

Manufacturers of Mercury, Cinémaster, Corsair Cameras and Photographic Equipment

Goldsmith,
S.-F.P.S.A.
L. Mathies.

L. O. PUB.
S. S. IN
ELA
35 PARK
A. ROSEN-
ANGELES:
CIL. OHIO.
SHED 1937.

8, No. 4

TO SATISFY THE CRYING NEED OF CAREER-MINDED PHOTOGRAPHERS

New York's famed School of Modern Photography provides ultra-modern schooling methods for swift attainment of professional skill.



1. Magnet to camera hopefuls is the amazing record of success achieved by SMP students under the guidance of top-flight photographers. Typical is GUY VENTI (left) who teaches advanced illustration (post-graduate course). Case in point is ALEX J. ROTA (see below), one of many ex-servicemen now taking advantage of G. I. Bill of Rights privileges at the School.

2. Reclining on their laurels is not for the graduates of SMP! They're continually forging ahead to bigger and better positions, as witness WENDELL R. BROWN (right) who leaves an unusual photo post at New York's Museum of Natural History (see Minimum July '43) to join the sterling firm of Underwood and Underwood; perhaps to acquire some of the brilliant technique of Underwood's famed Lejaren Hiller.



4. Truly man-sized are many photo posts held down by women SMP graduates. OLGA SENYUK (right) goes directly from the School to Wright Aeronautical. SMP Placement Bureau records bulge with success stories to prove that woman's place is in photography.



5. Information Please! "What about tuition fees?" Specialized courses, day or evening, are exceptionally moderate. Visit the School, or write for outline of courses. Address H. P. Sidel, director, Dept. MI.

THE SCHOOL OF MODERN PHOTOGRAPHY
136 East 57th St., New York City

The Last Word

Good luck, Pvt. Horne

Sir:

I notice that you used my son's picture on the October cover of your magazine, and want to know if you'll send me a few for our scrap books. His picture came out on the cover of April 25th *Liberty* magazine. He posed for this pic at Ft. Benning, Ga., but is now in a hospital in England, having been wounded in the invasion of Holland. His address is Pvt. Thomas A. Horne, 7000489 Co. H, 508 Prcht. Inf. A.P.O. 230 c/o P. O. New York.

Thanking you I remain yours truly

Mrs. W. A. HORNE,
310 5th Ave., Oakdale, La.

We love America

Sir:

I was very much interested in the story in your current issue about the young Tulsa photographer who flopped in Tulsa, Okla., with his glamour pix, particularly in view of the fact that we have made a definite success here in Portland with the very same thing.

I am enclosing a copy of the Glamourgraph, our quarterly advertising publication, which is on sale at all news stands in this territory—thereby permitting prospects and customers to pay for our advertising! Our glamour business has grown so heavy that we have been forced to convert our "Kiddies" studio, recently opened, in another glamour studio to handle our overflow business.

We have had a few cases where mothers nearly fainted and one case where a mother actually called in the police! These are the exceptions. We had a 12-year-old girl whose mother ordered \$162.00 worth of glamour pictures!

Anyway, thought perhaps you'd be interested, in the fact and in the Glamourgraph enclosed.

W. R. HARRISON,

15 West Powell, Gresham, Ore.

• Mr. Harrison's glamourgraph proves that you, too, can be glamorous. Boa feathers, luminous hair, full luscious lips and raised eyebrows. Phone Webster 4961. Now!—Ed.

Dream Camera

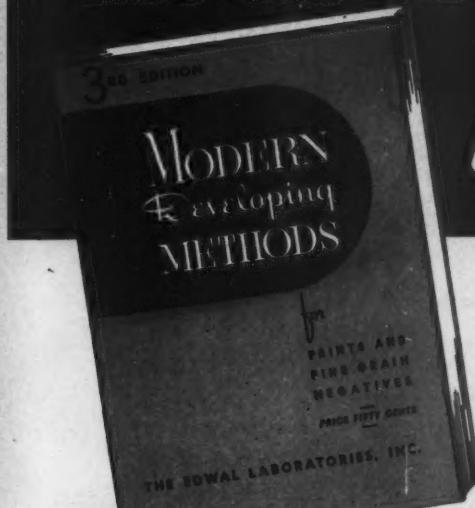
Sir:

I have received the letters you forwarded, and am very glad to know how well the readers of *MINICAM* enjoyed the article about the "Dream Camera" in the October issue.

Yes, I received the telegrams you forwarded, and have answered them. I have several proposals with regard to the production of this camera, all have my most careful consideration. Just who will eventually produce it, I cannot say at this time, but it will be on the market in due course, I hope. I would like to thank you personally, and all of your staff for your interest.

W. D. THOMPSON,
The Radiera Corporation,
San Diego, California.

Give This "How-To-Do-It" Book



140 PAGES
BEAUTIFULLY
ILLUSTRATED

NEW 3RD EDITION MODERN Developing METHODS

REVISED AND ENLARGED
... JUST OFF THE PRESS

8 DATA-PACKED CHAPTERS TO IMPROVE YOUR PICTURES

1. PRACTICAL NEGATIVE MAKING (How to develop your first or your 1000th roll)
2. ELEMENTARY PHOTOGRAPHIC CHEMISTRY (What's in a developer... and why?)
3. DEVELOPERS FOR FILM (Various formulas and how to use them)
4. PRACTICAL PRINT MAKING (What a good print is and how to make it)
5. DEVELOPERS FOR PRINTS (Print developers for every purpose)
6. TECHNIQUE (The right way to mix and store solutions, prevent and remove stains, reduce or intensify negatives, etc.)
7. WHICH DEVELOPER... WHEN AND WHY (A chapter for advanced amateurs)
8. TONING (Various methods of toning; preparation of the print, etc.)

* ENTIRELY NEW CHAPTERS

Thousands of amateurs and advanced photographers have learned how to improve their pictures through reading earlier editions of this practical book on modern developing methods. It shows you how to avoid mistakes and save precious film and paper. It has two *brand new* chapters on print-making and toning. With its beautiful illustrations by prominent salon exhibitors, "Modern Developing Methods" is a guidebook to finer photography that should be in your darkroom. Get a copy at your dealer's today!

ILLUSTRATIONS BY
FAMOUS PHOTOGRAPHERS

— ALL EDWAL USERS —

- ★ ROWENA FRUTH
- ★ GUSTAV ANDERSON
- ★ HANS KADEN
- ★ TORKEL KORLING

ORDER FROM YOUR DEALER

Or Mail This Coupon

THE EDWAL LABORATORIES, INC., Dept. 1M
732 Federal St., Chicago 5, Ill.

Gentlemen: I am unable to get "Modern Developing Methods" at my dealer. Enclosed find 50¢ for one copy, sent postpaid.

NAME _____

ADDRESS _____

CITY _____

ZONE _____ STATE _____

There's an EDWAL Solution for Every Darkroom Problem



From the lips of photographers
everywhere come many questions.
Boiled down, most of them ask,
"What can I look forward to
in post-war photography?"

one of the big answers is

KIN-O-LUX

● For — whether it's film or any of a number of a constantly growing line of superior photographic products — many proven under fire in the service of Uncle Sam — the name of **KIN-O-LUX** will be a guarantee of "more-for-your-money" value . . . quality . . . confidence. Look to **KIN-O-LUX** — for the future.

KIN-O-LUX, Inc.

105 WEST 40th STREET • NEW YORK 18, N. Y.

Coming into the picture
are many new photographers
keeping home-movie-fires
burning for war-absent loved
ones. After wartime curtailments
... wartime substitutions . . .
they wonder, "What's in store
for us — come post-war?"

Uppermost in the minds of
photographic merchants are these
questions. "What products will I
have to sell . . . to satisfy . . .
to hold the confidence of my
customers? What products will
help me build sales . . . profits . . .
a real post-war future?"





SOME furloughs last forever

There's never been a furlough that was long enough. So much fun to crowd into a few short days. And when he's gone again . . . there's just a hazy, pleasant, jumbled memory.

But some families make those wonderful days last a lifetime . . . for long ago they got the habit of recording *all* their pleasant occasions on film . . . with their B&H Filmo Movie Camera.

And now they'll add the films of his days at home to all the others . . . and enjoy them again and again on their Filmo Projector . . . while they wait for him to come home . . . for good.

Soon after he does come home again for good, there will be exciting new Filmo Cameras for you. If you've never made home movies, then you'll want a new easy-to-use Filmo . . . more failure-proof than ever.

If home movies are "old stuff" to you, then

get ready for some real movie thrills when you see the results of B&H OPTI-ONIC research showing with new clarity and brilliance on your home screen.

Bell & Howell Company, Chicago; New York; Hollywood; Washington, D. C.; London. *Established 1907.*



16mm. Auto Load Camera

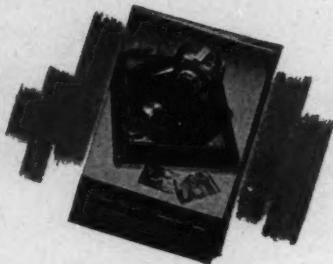


With a B&H Filmosound Projector you open up a whole new exciting world of entertainment for your family and your friends . . . for not only may you enjoy your own personal films, but you have at your command a wealth of Hollywood's finest productions—available from the B&H Filmosound Library.

Bell & Howell

FOR 37 YEARS MAKERS OF THE WORLD'S FINEST EQUIPMENT
FOR HOME AND PROFESSIONAL MOTION PICTURES

Get your copy now!



NEW FREE CATALOG AND BUYING GUIDE

Here's the photo equipment catalog of the year . . . Wards new 40-page catalog. Inside the colorful covers it's crammed with illustrations and prices of cameras and photo equipment that are sure to interest you. In addition, it contains a valuable "Buying Guide" to help you select the camera, lens and other accessories you need.

This new Ward Catalog features quality cameras and accessories of nationally known manufacturers—Eastman, Graflex, Bell & Howell, GE, Ansco and other reliable firms.

Cameras and many other items shown in Wards catalog may be bought on convenient monthly payments, with no carrying charge.

Catalog also contains information on the simplified way to buy Government-restricted photographic equipment.

Shop From Your Arm Chair

Buying by mail is convenient and fast. All merchandise is guaranteed to give satisfaction or your money back. Mail the coupon now to nearest Ward Mail Order House, for your free copy of Wards Catalog.

MONTGOMERY WARD & Co.
Please rush my free copy of
Wards Photographic Catalog. MPJ

Name _____

Address _____

City _____

State _____

MONTGOMERY WARD

Chicago Albany Baltimore Denver Ft. Worth
Kansas City Oakland Portland, Ore. St. Paul

He shook and shook

Sir:

In reference to Eugene Wyble's letter, P. 91, October MINICAM. He was sure right. I "got in there, and shook." I had a roll of Super XX in the reel and was using DK-20. I did as Mr. Wyble advised and shook almost continuously for 10 min. When it was fixed, washed, and dried, I looked at the results, and what results! I never had a more perfect sparkling set of negatives. Even though they were taken with a small folding camera 20 years old, I made some beautiful enlargements (8x10) from this roll of 116. It was the best roll I have ever developed. From now on, it's "get in there and shake" for me. This article has certainly improved my picture taking, even though I'm only 15 years old. I hope the rest of your readers try what I did.

PAUL J. WOOLFF, JR.,
4037 Riveredge Rd.,
Cleveland, 11, Ohio.

Photo Classes

Sir:

I am very glad to advise you that Mr. J. Ghislain Lootens, F.R.P.S., will continue to conduct his courses at the Central Branch V.M.C.A., 55 Hanson Place, Brooklyn 17, New York, as usual.

"Fundamentals of Photography" will meet on Tuesday evenings, beginning January 30, 1945, for fifteen weekly sessions of 2½ hours each. "Advanced Technique" follows the same schedule on Monday evenings, with a period for personal problems from 7:30 to 8 o'clock, when the regular lectures and demonstrations begin. These courses are approved by the Department of Education for "In-Service Credit" for teachers of New York State Public Schools. "Portraiture" is fully covered in six sessions, and "Retouching" in eight sessions. These are both conducted on Saturday evenings in limited groups for which detailed information may be secured by writing, or telephoning Sterling 3-7000.

L. H. CALVERT,
Director of Education,
Phone Sterling 3-7000.
Brooklyn of Education.

• For a booklet containing name and address of photo instructors in 29 states, send 25c to MINICAM.—Ed.

Give them confidence

Sir:

I would like to be counted among those who think a good con man would make a successful portrait photographer.

I don't mean he should cheat the customer. Quite the contrary. He should give the customer more than he or she, especially if the customer be a she, has any right to expect.

The confidence man's trick in putting over a swindle is to make the victim think he is more clever than he really is. If he turned portrait photographer, the con man would use the same sort of line of conversation to make the customer think she is more attractive than she really is.

(Continued to page 15)

, P. 91,
I "got
per XX
as Mr.
nuously
ed, and
that re-
ling set
e taken
old, I
(0) from
I have
in there
certainly
though
of your

R.,
Rd.,
Ohio.

Mr. J.
ue to
Branch
7, New

eet on
1945,
each.
sched-
or per-
when
begin.
rtment
teach-
ortrai-
l "Re-
the both
ited
may be
sterling

r,
ion,
000.
ion.
ess of
MINI-

who
cess-

omer.
e cus-
if the

over
more
portait
same
cus-
she

SENSATIONAL WAR BARGAINS IN LENSES AND PRISMS

All Items Finely Ground and Polished but Edges Very Slightly Chipped, which We Guarantee Will Not Interfere with their Use

Our Policy on War Surplus

1. We are co-operating to move surpluses while the war is on.
2. Our customers receive full benefit of all savings effected through our purchases of war surpluses. We do not hold merchandise for high present or future prices.
3. We are making a special effort to bring our items to the attention of all Schools, Colleges, Amateurs, Researchers and other persons who may be interested.



SPECIALS IN LENS SETS

SET No. 1M—"Our Advertising Special"
18 Lenses for \$1.50 Postpaid, plus
10 page Idea booklet.

For copying, ULTRA CLOSE-UP SHOTS, macro-
photography, experimental optics, magnifying
and for making a two-power f/16 telephoto
lens, "Dummy Camera," Kodachrome Viewer,
DETACHABLE REFLEX VIEWER for 35mm
cameras, stereoscopic viewer, ground glass and
enlarging focusing aids, TELESCOPES, low
power microscopes, and for many other uses.

SET No. 2M—"The Experimenter's Delight"
35 Lenses for \$5.00 Postpaid, plus
10 page Idea booklet.

Contains all the lenses in Set No. 1—plus
twenty others of our more expensive lenses.

SET No. 10M—"The Experimenter's Dream"
60 Lenses and new 50 Page Booklet "Fun
with Chipped Edge Lenses." \$10.00
Postpaid.

Contains all the lenses in the above sets plus
20 others that make this a "sensational buy."
This variety of lenses in this set will enable
you to conduct countless experiments, build a
great variety of equipment.

New 50 Page Idea Book on "Fun With
Chipped Edge Lenses." Wide variety
of projects — described in detail and
illustrated. \$1.00 Postpaid.

PORRO ARBE PRISMS #2008-M . . . 25c each
Postpaid. Contains a 2 1/4" diameter and 1 1/4" long

war bargain. Normal price would be 10 to

30 times the above quotation.

REDUCING LENS SET #1004-M . . . \$1.20
Postpaid. Contains a 2 1/4" diameter and 1 1/4" diameter reducing lens of different powers.

ASTROPHOTOGRAPHIC MICROSCOPE MIRROR—2" diameter, aluminized, telescope for making powerful, color-corrected telescopes. Perfect in every respect. Stock #5002-M . . . \$49.00 Postpaid.

Satisfaction Guaranteed

TANK PRISMS

In order that the tank driver shall not get shot in the face, two of these Silvered Prisms are used to make a periscope (without magnification). We have secured a number of these that are very slightly chipped, making possible their sale at a very low price. They are 90-45-45 degree prisms of huge size—5 3/4" long, 2 1/8" wide, finely ground and polished. You can use these Prisms to make Periscopes to see over the heads of crowds, to photograph fish under water, to view high or low gauges, etc. Also excellent for experiments, classroom demonstrations at high schools, colleges, camera clubs, astronomy clubs. Some of our ingenious customers have used these Prisms to make camera stereo attachment, photometer cube, range finder, etc. And here's an excellent, unique gift idea. For 5c we supply 100 gold letters with which you can turn one of our Silvered Prisms into a desk name plate in 5 minutes of easy work. Normally, these Prisms would retail from about \$24 to \$30 each.

Stock #3004-M—SILVERED TANK PRISM—Price \$3.00 each Postpaid. Stock #3005-M—PLAIN TANK PRISM—Price \$2.00 each Postpaid. This one is excellent for projecting all the colors of the spectrum—a beautiful sight.

FOUR TANK PRISMS—Special—\$7.00 Postpaid—This is the most sensational bargain we have ever been able to offer.

16 MM MOVIE PROJECTING LENS SET—No. 4002-M, \$4.00 Postpaid. Consists of 2 cemented achromats 18.5 mm. in diameter with effective focal length of 2". Originally manufactured for U. S. Government.

MAGNIFIER SET—No. 1002-M, \$1.00 Postpaid. Contains four lenses, diameter 4 to 2 inches. Up to 20 power. Included FREE with order—7-page booklet all about Magnifiers.

55 POWER MICROSCOPE SET. Perfect lenses for easy construction of your own useful compound Microscope. Interesting, instructive booklet all about Microscopes included FREE. Stock No. 1003-M, 75c Postpaid.

MFG. FOR NAVY'S 7 POWER BINOCULARS

KELLNER EYE-PIECE LENSES—You can use in Telescopes, Binoculars, Microscopes, etc. Consist of achromatic eye-lens and a field lens. Focal length 27.5 mm. Comes un cemented with FREE cement and easy directions.

Stock No. 6000-M—Unedged 75c Postpaid
Stock No. 6001-M—Edged \$1.25 Postpaid

COMPLETE SET OF LENSES AS ABOVE AND THE PRISMS
TO MAKE A MONOCULAR (TELESCOPE)

Stock No. 5100-M—Monocular Set \$5.00 Postpaid

• Minimum Order \$1.00

EDMUND SALVAGE COMPANY

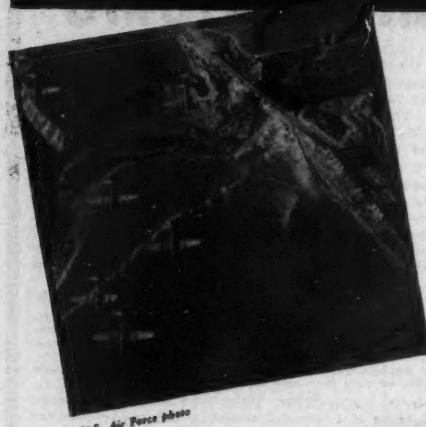
27 W. CLINTON AVE.

DEPT. 3

P. O. AUDUBON, N. J.

These

... and other Great War Pictures made with
Fairchild AERIAL CAMERAS



The pictorial record of World War II out-rivals anything previously known . . . thanks in part to Fairchild Aerial Cameras. Their advanced design, accurate shutter speeds and high-precision workmanship make clearly detailed pictures like these possible. But the prime purpose of Fairchild Aerial Cameras is to serve as the "eyes" of our Armed Forces, revealing photographically (from altitudes up to seven miles) such details as the strength and nature of enemy troop concentrations, installations and equipment. The war-time achievements of these *aristocrats of precision cameras* suggest the standards of excellence that amateur photographers may expect when "tomorrow" comes.



Fairchild CAMERA
AND INSTRUMENT CORPORATION

88-06 VAN WYCK BOULEVARD, JAMAICA 1, N. Y. • New York Office: 475 TENTH AVENUE, NEW YORK 18, N. Y.
THE STORY OF AERIAL PHOTOGRAPHY IS THE STORY OF FAIRCHILD CAMERAS

G-E FLASH BULBS ARE BACK!

***photofloods and photo enlarger
lamps, too***

With the rescinding of WPB order L-28, stocks of G-E Mazda Photoflash and Photoflood lamps will be increasingly available to your supply house. So keep asking for them, and get better shots.

BUY WAR BONDS
AND HOLD THEM



G-E MAZDA PHOTOFFLASH LAMPS

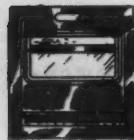
GENERAL  ELECTRIC

8. N. Y.
ERAS
Hear the General Electric radio programs: "The G-E All-Girl Orchestra", Sunday 10 p. m. EWT, NBC; "The World Today" news, every weekday 8:45 p. m. EWT, CBS.



Be a "Show-off"

BUT PROTECT YOUR COLOR FILMS WITH
AMERICAN MADE *Leica* ACCESSORIES



LEICA AUTOUNTS. Deluxe complete slide holders. With 2 glass plates, aluminum frame. Slides can be interchanged.

\$1.65 per box of 18.



LEICA DESK VIEWER. Magnifies and brilliantly illuminates your color slides. Has 3 element achromat lens... brings out all the delicate colors. Produces life-like 3 dimensional effect. Illumination adjustable to individual slides. Can be used for 2 x 2 in. slides and 35 mm filmstrips. \$57.00 (without Film Attachment).



LEICA SLIDE BINDER. Complete slide holders. With glass plates and mounting cover. Made of sturdy compressed board. \$3.75 per 100.



LEICA COVER GLASS PLATES. Have ground edges... binding tape can be applied smoothly. Use with Leica Masks for permanent binding. Glass plates \$1.25 per 100. Masks (with tabs for framing) \$3.95 per 100.



LEICA VIII-S PROJECTORS. Precision made. Produces brilliant sharp images. Can be used with Leica camera lenses.

Preserve those precious slides so that you can "show them off" time and again without their becoming scratched and soiled. Use one of the Leica Slide Holders or Leica Cover Glass with smooth, ground edges for complete slide insurance. Whether you have used a Leica camera or other make does not matter... you can still show them and protect them with the Leica accessories illustrated on this page.

SEE YOUR PHOTO DEALER ABOUT THESE LEICA ACCESSORIES. There's an excellent chance that he has them in stock. If not, he'll have them when victory is won.

KEEP YOUR PRESENT EQUIPMENT IN GOOD SHAPE. Our service department is fully equipped for checking, repairing and servicing Leica cameras, lenses and other Leica equipment.

AN AMERICAN LEICA IS NOW BEING MADE FOR OUR ARMED FORCES

E. LEITZ, Inc., 730 5th Ave., New York 19, N.Y. (Dept. MP-2)
Please send me information on Leica accessories
Please send me a copy of the LEICA MANUAL. I enclose \$4.00.
Send it postage free Send C.O.D. I'll pay \$4.00 plus postage
on delivery

Name.....

Address.....

City.....

State.....



LEICA MANUAL 547 pages, 28 chapters written by 22 outstanding experts. Complete information on all phases of small camera photography. \$4.00 per copy.

No matter how inspired your lighting, and how flawless your processing, your portraits can be disquieting both to yourself and to your model if you fail to capture a pleasant or pleasing expression on, the subject's face.

Ever notice that when a subject is making a selection from a set of proofs she pays no attention whatever to lighting or camera angle but makes her selection entirely on the basis of facial expression?

The proper mood for your model, unless you're doing something eccentric and artistic to please yourself and not the subject and her friends, should be one of happiness.

She should be glad she is having pictures taken, glad she chose this particular evening for the sitting, and especially glad she has chosen this particular photographer, meaning you.

And that's where the talents of the successful confidence man would come into their own, because this is a case for flattery, and incidentally flattery certainly has caused a great deal more happiness than unhappiness in this world of trials and tears.

When a girl thinks she is beautiful and looking her best and thinks her beauty is being noticed and appreciated, she can be photographed with any lighting whatsoever with pleasing results—but no lighting will save the situation if she be nervous or uncertain about whether the whole thing is worthwhile.

Point out each of her good features repeatedly, even if she hasn't any unusually good ones. When you change the lights, tell her you are doing so to capture the exquisite line of her chin, or her placid or intellectual forehead, or to emphasize the charm of her hair.

If she bears any resemblance—even the slightest—to any motion picture actress, living or dead, pounce on that fact immediately and then pound on it continually.

Of course, she won't believe you are sincere in every one of your crude compliments, just as you don't believe every word a high pressure salesman tells you about any product—but it's easier to sell her on herself than it would be to sell her anything else, and enough of your flattery will register to make all the difference.

Making the model happy about the whole thing pays especially rich dividends if she must return for a second sitting, because then she approaches it with exactly the right attitude, with anticipation of an enjoyable experience, and that frame of mind will be reflected in her appearance even more than it was the first sitting, which may have started with the girl feeling nervous and tense.

If you're in the portrait business, you'll find that many customers will come to you simply because their friends have told them what a good time they had in your studio.

And if you are an amateur, you'll find that besides making more pleasing pictures in this way, you'll make many new friends and make old friends like you much better.

EUGENE M. HARSON,
227 West Channel Rd.,
Santa Monica Canyon, Calif.



The Famous Challenger Model.

Now You Can Again Buy A



SCREEN

(Reg. U. S. Pat. Off.)

WITHOUT A PRIORITY

The 30" x 40" Da-Lite Challenger, recently reduced in price to \$10.00, is now available for your color slides and home movies.

The popular-priced Da-Lite Versatol Screen (also a tripod model) is also available without priority:—30" x 40"—\$7.50, 40" x 40"—\$9.00, 37" x 50"—\$10.00.

These screens have Da-Lite's famous glass-beaded surface which reflects maximum light and shows pictures in full brilliance and in true colors. See Da-Lite Screens at your dealer's! Write for illustrated circular now!

DA-LITE SCREEN COMPANY, INC.

Department 1M
2711-23 N. Crawford Ave., Chicago 39, Ill.

Buy More War Bonds!

The
TWIN BOTTLES
 that are
 Indispensable for
**FASTER, EASIER DEVELOPING
 AND FINER MORE
 BEAUTIFUL PRINTS**



QSE Ultra Fine Grain Developer
 insures beautiful grainless
 enlargements, 20-30 diameters or
 larger. Develops any standard film,
 5 to 11 mins. 1 qt. develops 20 to
 40 rolls 35mm. film (or equivalent)
 without replenishment.

QSE Royal Toner
 makes 6 beautiful tones
 available in from 10 to 60 secs.,
 ranging from blue black to
 sepia or rich brown. Any tem-
 perature from 60°-90° F. No
 fading—permanency assured.

Ask your dealer
 (Descriptive folder on request).

SWAIN NELSON LABORATORIES, INC.
 2341 Glenview Ave. • Glenview, Ill.

"One of the best buys I
 ever made is my
ALBERT
 Tripod"

"Yes, it gives me rock-steady pictures every
 time. No wasted film. And it sure has stood
 hard service." 3 famous models—President,
 Royal, Royal De Luxe. Scarce now—but back
 again, post war, better than ever.

BUY MORE WAR BONDS

"Big Brother" has "Little Sister"

Sir:

When I saw the one of this picture of bear
 cubs in *Field and Stream*, I was sure that I
 had seen the same shot in MINICAM even
 though it was 6 months earlier. In looking
 through the back numbers of MINICAM I found
 the pose to be the same although the subject
 matter in one was bears and the other "dears."



I believe you will agree that the posing is
 strikingly similar; even to the expression of
 the mouth on the two larger subjects in each
 photograph. I hope that Mr. Darvas will not
 take offense to this comparison even though the
 title to the one of the cubs is "Little Sister."

RUSSELL F. HARDY,
 45 West Peach Orchard Road,
 Dayton, 9, Ohio.

• Dave Darvas' "Big Brother" has been hung in
 84 salons. Earl Bridson snapped the bear cubs
 at a State Game Farm. We'll wager Dave Darvas,
 given the negative, could hang these two prints in
 any salon.—Ed.



ALBERT
 SPECIALTY CO.

227-231 S. Green St., Chicago 7, Illinois

bear
hat I
even
oking
found
subject
years."

ng is
n of
each
I not
h the
"

ad,
io.
ng in
cubs
arvas,
nts in

"Rival of the brush and palette for high artistic honors"



DASGONVILLE
Charcoal Black
TEXTURE PAPERS

The world's most distinguished promotion papers since 1850

Rival of the brush and palette for high artistic honor. Charcoal Black textures offer great opportunities for escape from the commonplace in photography. Not with paint, but with light and your own equipment of talent can you achieve prints of remarkable quality. Charcoal Black, made to exclusive formulas from finest paper stocks, is available in a variety of textures suitable for any subject over a wide range of negatives.

FOR CHRISTMAS GREETING CARDS
With Charcoal Black textures, the photographer of taste may produce Christmas cards of rare distinction . . . the kind of cards which prompts the recipient to say, "I'm going to keep this one forever."

SEE ALL 4 AT YOUR DEALERS
OR CHARCOAL BLACK PAPERS
OR Charcoal Black Portfolio of prints
OR Newly revised brochure
OR WRITE DIRECT TO US.

DASGONVILLE CO. LTD.

205 EAST 42ND STREET • NEW YORK 17, N.Y.

THE BEST CHRISTMAS GIFT

• • • UNITED STATES WAR BONDS.





Candid and Gag Shots

JOAN CRAWFORD and husband Phil Terry drive away from the Mocambo.



PHOTOS BY
GENE LESTER

DOWN IN FRONT!
Lester chose a stern
view of *Life* photog-
rapher Johnnie
Florea and his wife
as they watched a
baseball game at a
Hollywood Can-
teen picnic.



GENE LESTER, small of stature, but a driving force in Hollywood photographic circles, does most of his night club work unobtrusively with a Contax and synchronized flash. Left, above, Barbara Stanwyck and husband Lt. Robert Taylor at the Clover Club prior to his return to active duty. Right, above, Binnie Barnes watches husband Capt. Mike Frankovich eat his dinner G. I. style. Below, Keenan Wynn and his wife hosting Van Johnson at the Mocambo.





Candid and Gag Shots

GAG SHOTS, should seem spontaneous. Above, "The Voice," Frank Sinatra with Jerry Lester, comedian, and Gene Kelly. Below, left, Maxine Fye distracts Danny Kaye's interest. Below, right, Walter Pidgeon seems aghast at the impromptu jitterbugging of Olivia DeHaviland.





PURE WHIMSEY keynotes these three pictures taken at the Mocambo, one of Hollywood's favorite night spots. At the left, above, Bob Cummings suffers (?) a poke in the nose from K. T. Stevens. At the right, above, columnist Harry Crocker suffers (?) as Greer Garson serenades him on a miniature harmonica. Below, Kay Kyser also suffers (?) as Bob Burns and Bob Hope congratulate him on his marriage to model-singer Georgia Carroll.



Lester,
, right,



FIRE FIGHTERS

VIRGINIA LOEGER

SEEING the smoke and hearing the screaming of fire engines, Virginia dashed into a nearby store, borrowed a camera and scurried for the fire. This is the result.

VIRGINIA

learns to be a photographer

By C. STANTON LOEBER

YOU'LL never be a photographer," I snapped. "Even if you live a thousand years." I meant it. I was mad. It was past midnight. And for hours we had been discussing . . . or was it cussing . . . Virginia's pictures.

"You can't go around clicking your shutter like a machine gun," I told her. "Nor can you dash into the dark room with any old negative and come out with a masterpiece. You've gotta get it in the negative . . . first. Ferricyanide and goo and pencils don't make photographs. And that cockeyed stuff you shoot . . . it wouldn't make pictures anyway."

I was angry. I'd been repeating that and much more all evening. And Virginia was being just as stubborn as I . . . or almost so. Here laid a print of wet towels wrapped in some screwy, crazy pattern around a wine glass. There was a print showing the shadow of a hand in a sewer pipe. Here was a shot of the mainspring out of an old alarm clock with ghostly hands floating above it.

In early girlhood, Virginia had decided

she'd be an artist. She had studied at the Art Students' League, lived in Greenwich Village, wore her hair long, studied in Paris, Munich, Spain, listened to the shop talk of the art world. Then she had dropped painting.

Somehow, she had thought that photography consisted in pointing one's lens at any old thing and the rest was done by some mystic darkroom magic. About the time she dropped her paint brushes and palette, abstractions had absorbed her. Now, abstractions were being mixed up with photography in a careless disdain of photography's technique.

Her work was not good. Negatives were grainy. Prints were muddy. Right then I knew that she was the world's worst photographer. And I said so.

"Well!" she gasped. I waited while she caught her breath. Then, suddenly sweet, as though I hadn't been snapping like a mad wolf, she asked, "Why don't you teach me?"

Even though the surprise of her reply nearly knocked the wind out of me, I was



still able to snap, "O. K. But you've got to do exactly as I tell you."

She laughed. "All right. For seven days and seven nights."

So it was agreed. And right there began the making of a photographer, who, in my opinion, someday might make many of us crawl into a back seat and like it.

First, at her suggestion, I gave her four negatives of my prints that had been successful in salons. Instructions were that she was to take the prints, too, and match them in quality. When she had done the best she could, she was to show them to me for criticism . . . not before.

The second step was that when next

we went looking for pictures on an early morning trip, she was not to click the shutter on any subject until I had given an O.K. That was the toughest part of the assignment; because, as I've said, Virginia has a mind of her own. It took some strong arguments to convince her that the thing she wanted to photograph would not make a picture.

Large shadowed masses had to be pointed out to her as only dull and uninteresting areas in the final print. The importance of light on the subject had to be stressed. Somewhere she had read that one should compose to the very edges of her negative. The thought of cropping was a sacrilege.

Because Virginia had a brain of her own, she learned fast.

The third step was that she get a larger camera. Today she uses a $3\frac{1}{4} \times 4\frac{1}{4}$ Graflex with cut film magazine. My restrictions on what and when to shoot were lifted long ago. Occasionally she refers to the four prints she used in learning print quality.

But there are many headaches . . . those times when she beats me in our camera club competitions; times when she has used all the hypo and I find it out only

PICTURE OF THE NEGATIVE



her four
been suc-
were that
and match
done the
them to
then next

the excess foreground. And it might have been that there were some interesting values in the trees up there.

"And one wonders, does the editor know that making a picture of the negative involves the making of a contact print on film . . . a positive . . . and that this must be washed and dried and then a contact print made on paper from the positive? One wonders!"

WE SUGGESTED that Stan Loeber send along a picture of the negative he gave Virginia, to use, "pointing out the faults, if any." Here's the negative and his reply:

"Let it be admitted right now that the writer never concedes any faults in his negatives . . . only virtues. But, if he were to do it again, he would have pointed the lens just a bit higher. That would have been to eliminate



VIRGINIA'S PRINT NO. 1 FROM MY NEGATIVE

ONE OF Virginia's first efforts. Its lack of brilliance; the weak, grey tones; are typical of most beginners. Cold developer or too short a printing time can cause this effect. In this case the printing time was insufficient . . . 15". Paper developers should be maintained at temperatures of from 65° to 70° F. Below that the chemicals tend to become inactive. Above that, the emulsions are apt to frill, bubbles to appear and at high temperatures, the emulsion might slip off the paper. Use your thermometer.

This is from the full negative. For some reason, Virginia had the idea that good photographers must always compose to the very edges of the negative; must never crop in enlarging. But there is far too much on the bottom. The post and tree trunks on the left edge are unnecessary. They contribute nothing to the picture, rather, clutter it.

Actually the sheep and the dust they have stirred up make the picture. The rest is but a back drop on the stage . . . and the sheep are the actors. And all stage settings must be less important than the actors.

after I've set up for an evening in the dark room; times when I've brought a model home and she's made the better pictures . . . and especially those times when she's used all my 14x17 paper for test strips.

Then there was the time we ran into a full acre of shimmering spider webs, jewel studded from the night's mists. They were large and perfect and just begging to be photographed.



VIRGINIA'S PRINT NO. 2 FROM MY NEGATIVE

THIS IS a much better effort than No. 1. The printing time was longer, 30", so there is a stronger feeling of light on the sheep. The dust is right, and the print is less wishy washy.

There was careless focusing; leaves against the sky are noticeably blurred. A magnifying glass or other aid to focusing could have prevented that. There is no feeling of the sun-rays spotlighting the sheep. Not enough printing time. The final print required 45".

And now, because the tree trunks are darker, almost a silhouette effect against the sky, that sky seems especially white. Being large in size, close to the edge and as white or whiter than the sheep, it becomes distracting; pulls attention away from the picture's center of interest, the sheep.

Someone might suggest a filter to darken this area; to lessen its importance. But, in "against the light" shots, filters don't hold back the skies. The longer exposure needed to capture detail in the shadows, overexposes skies, with the consequent result that they print white. Instead, this can be deepened in tone by flashing, burning in, or by some process, as megilp and powdered graphite.

For once I broke down and suggested that I'd save her the trouble of developing her negatives by doing them with mine. Since we each used the same size and kind of cut film, I felt generous.

But tragedy smacked us. It's the only time I've ever felt like wringing her lovely neck . . . and I know Virginia could have put ferricyanide in my soup with a smile. Even today, if either of us wants to start something, all we do is say, "spider webs."

TIVE

. The
is a
the dust
y.

against
lifying
the pre-
the sun-
print-

arker,
, that
n size,
than
ls at-
er of

darken
ut, in
hold
eeded
xposes
they
ned in
process,

gested
oping
mine.
e and

the only
lovely
have
smile.
start
webs."

THE CHANNEL

By C. STANTON LOEBER



PRINT No. 1

EXPOSURES for "against the light" shots and the development of the negatives are somewhat tricky. Exposures are long, roughly some four times the reading one's meter might indicate. Developing times are just about half normal. This is in order to get some detail in the shadows and to prevent the highlights from blocking up so dense in the negative that a print would be nearly impossible.

THIS IS an undodged print. Virginia quickly realized that she had not gotten the sparkle of the water, nor was the sky dark enough.

PRINT No. 2

THIS, TOO, is a typical print; typical of the beginner who has been printing too light. One day he has seen values in one of his over-prints that until then, he never knew existed. Fascinated with the possibilities of deep printing, from then on, he cooks everything.

So this second print she gave a generous printing time. True, the sky went darker: There was some sparkle in the water. But the shadowed sides of buildings and boats went black. In fact, the little boat became lost against the dark mass of the building beyond.

The gleam of light was gone from the water churned up by the small boat. Virginia had another idea. She'd try a paper of less contrast.

In that batch of negatives was one that was perfect; sharp, beautifully back lighted; every dew bead glistening. And in the center, a fine fat spider. If ever there was a masterpiece, that was it. I was thrilled, for that was my negative.

So I rushed to Virginia with it, happy as could be. She took it, held it to the light and a slow smile spread happily across her face. "Stan," she said. "It's a honey." Then she added: "How'd yours turn out?"

That was my negative and I said so. It was Virginia's negative and she said so. As I've said, I'm stubborn. Maybe I've said Virginia is, too. Anyway, we never did make a print from that negative, not even a contact. We filed it. That was the only way. But ever since then, Virginia develops her own negatives . . . and I develop mine.

In her photography, Virginia has not specialized, that is, she doesn't make a specialty of shooting any one kind of subject. Her approach is bold; her pictures have greater strength than is the case with the average woman photographer. She enjoys sharp textures, strong charac-

that
back
d in
here
was

appy
the
pilly
t's a
ours

o. It
l so.
I've
ever
not
the
inia
de

not
te a
sub
tures
case
her.
charac-

terization, bold drama in her pictures. She has the photographic eye. While she has done some landscapes on the sweet, romantic side, she prefers the vivid, striking result. Even her approach to child photography is along this line, rather than the sweet, delicate presentation most photographers give children.

Though her time for photography is greatly limited, her darkroom work is done in a frenzy of excitement and deep enjoyment. Her spotting is meticulous. She belongs to no school or ism in photography, but does prefer her own work to be strongly photographic; keen sharpness, rich tones, true photographic values.

It is great fun, this mutual hobby. Many times we sit far into the wee hours discussing prints; maybe hers, maybe mine, maybe any print at hand. We have looked for the things that have made a print click; for the things that are faults and which keep that print from clicking.

I wonder if she hasn't taught me about as much as I have her. From our discussions has come a clearer understanding of what is meant by art; a clearer concept of the advantages created by the limita-

(Continued to page 103)



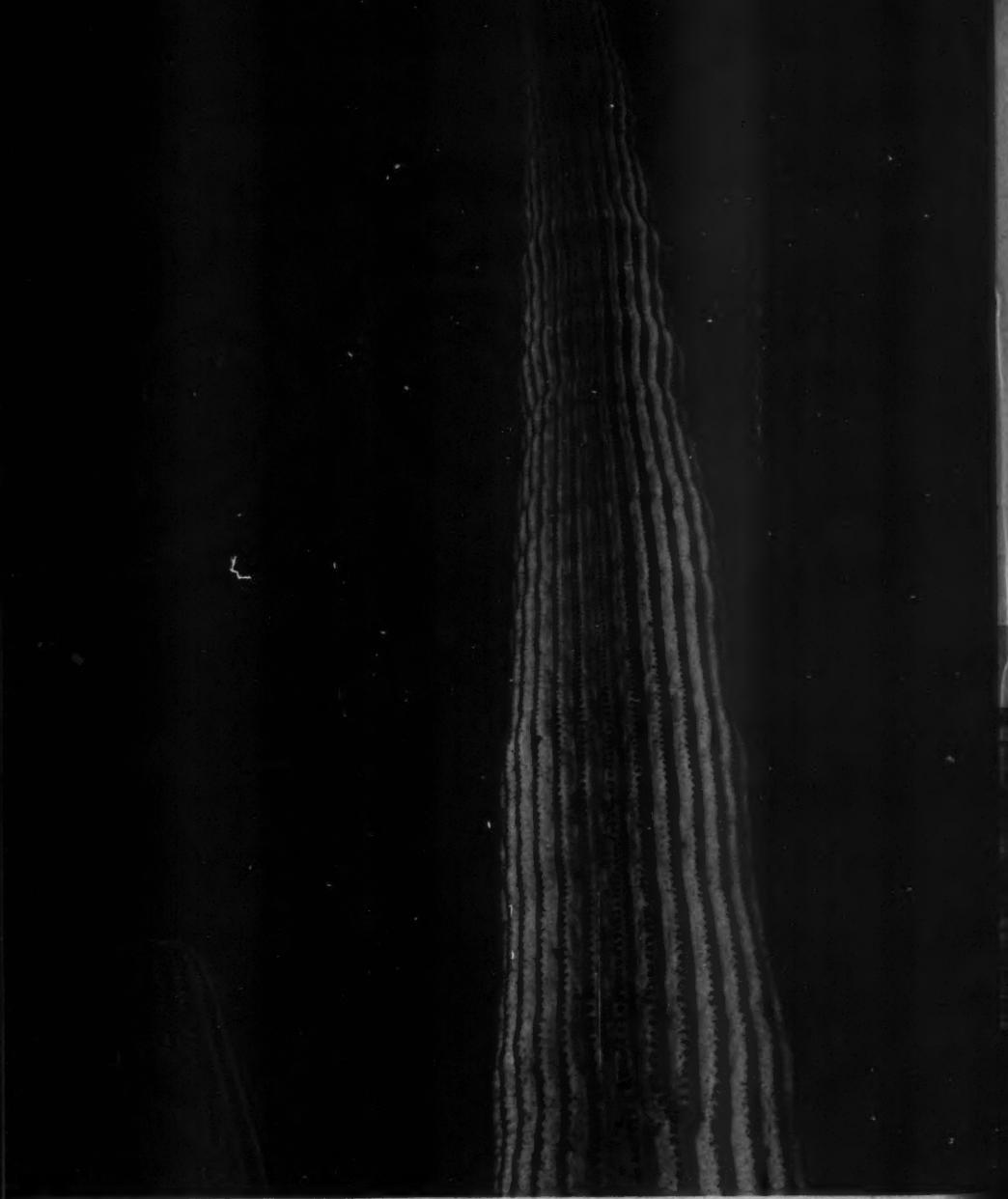
PRINT No. 3

VIRGINIA made this print on soft contrast paper. Not remembering that soft papers print faster, she overexposed in the enlarger. Almost as soon as the developer covered the print, it started going black, and like many novices, Virginia tried to save it by jerking from the developer. The result was mud. This taught a valuable lesson . . . good print quality is dependant upon correct printing time, right contrast paper, and full development of the print.

PRINT No. 4

FROM HER unsatisfactory results, Virginia drew some conclusions. She went back to normal contrast paper, dodged the shadowed sides of the building and boats . . . held them back while printing in the water in the upper portion. Then she held back all this upper part while gradually printing the lower portion deeper and deeper as she reached the bottom, in order to capture some of the sparkle.

The sky is too light; lifts one's eyes from the brilliant water foreground. This foreground is not deep enough to bring out all the lumbency of the water. But Virginia persisted until she matched the original. It took long hours and countless sheets of paper. But from the principle of using a good negative to match the quality of a good print, she learned technique.



FREDERICK SOMMER used imagination and a 25-foot Sahuaro cactus to produce this striking effect. He shot the picture from a low angle to accentuate the long tapering trunk, and filtered out the background so that the spiny corrugations would stand out with maximum sharpness. It was made in the Petrified Forest, Arizona.

VOICE FROM THE WILDERNESS

ONCE a photographer gets within focusing distance of the Rocky Mountains, he enjoys the same kind of calendar, art pictures of snow-capped peaks, sunsets, and pine forests that every other photographer has been taking for years. A singular exception is Frederick Sommer, photographer of the "anti-tourist West".

The barrenness and bleakness of what he calls the "in-between-the-National-Parks-country" exerts a powerful fascination for this 39-year old painter-photographer who was born in Italy, raised in Brazil, studied architecture at Cornell, and has lived for the past 13 years in a "shack"

on the rim of a plateau near Prescott, Arizona.

Sommer sets up his big 8 x 10 view camera, and makes evocative studies of the wrinkled crust of burned-out wasteland, the weather side of a ghost-town barn, the spiny trunk of a bizarre cactus. Rejecting the obvious and sentimental, his pictures raise a cry for the "speculative element and keener observation" in the choice of subject matter. They seem to say: Here is the West that nobody sees, yet have not these neglected forms and textures—this ancient landscape, this strange *désert* plant—a beauty and meaning which can also give wings to the imagination?





MOTHER AND CHILD—a hundred thousand madonnas express the same feeling, each with an originality of its own. Here is one photographer's interpretation.

• PORTRAITS BY DAYLIGHT

BY SIBYL FREED



NO LIGHT is more desirable upon the photographic negative, with its fine capacity for tonal gradations, than natural daylight. And the miles of atmosphere which intervene between us and the sun is the perfect diffusing medium.

In working indoors with daylight, the attitude of the photographer toward his sitter and to his material is different from what it would be if he were working with artificial illumination. In daylight, the approach is simpler, fundamentally more honest. The sitter is more at ease. Without artificial glare, it is possible to observe how the natural light falls with best effect on the subject.

Nearly everyone who has a camera will have access to one room at least where there is enough light to make good portrait exposures. Given a medium fast film

of Weston rating fifty, the average exposure varying from one-tenth second to one second, no one need bemoan the fact that he does not possess elaborate lighting equipment.

Speed should not be the decisive factor in making a portrait. The *Tattooed Man* was made with an exposure of nearly four seconds at about stop sixteen, late in the afternoon. This was an unusually long exposure. In my indoor naturally lighted portraits of adults, most exposures are a fifth or a tenth of a second, and even with children this comparatively slow speed can be successfully used. Portrait of a *Young Boy* was done indoors at a fifth of a second with a Graflex. The south light is less desirable than north light because of its flatness.

A high north window is the most desirable light, and whoever has a skylight



may consider himself lucky for the combination of a lower window and sky-light gives a diffused illumination on the head and hair while the lower front light fills in the rest of the figure. Too many cross lights are difficult to work against—in such a case, a curtain or screen should be used to cut down the unwanted brightness.

Needless to say, the most satisfying daylight portraiture is done out of doors when the sky is a clear blue in the early morning or late afternoon hours. The effect of this light is full and soft with fine modelling and perfect textural rendering. Full exposure must be given on these out-of-door negatives or they lose the peculiar brilliance of this lighting. Indoors, under-exposures are not as harmful. In this case, as in most cases of timing, it is well to remember the old saying, "expose for the shadows and develop for the highlights."

Outdoor portraits done with the subject's head against a cloudy or white sky

SURELY this isn't art! What photographer would want to take a picture of a half-naked old man, with hair on his belly, and tattooed legends on his arms and chest. That couldn't be art. With so much that is beautiful, like sonnets and flowers and babies and the Grand Canyon, why, of all possible subjects, pick this?

You're right. The picture isn't art; but as photographic tirades go, it's terrific. This is not a picture, but a protest.

It is a protest against uncounted thousands of photographers ignoring the life under their noses and seeking out bland and beautiful subjects of lilies glistening with drops of water, or greased nudes made of near-perfect 36's, of ropes coiled on boat decks, of mists rising in the morning from a clump of willows, of dogs looking wistfully at kittens, and vice versa.

This picture consciously tries to be a shocker by saying: "Why should I try to make things look like what they're not? I'll find subjects where the average man would grit his teeth. I'll . . ." Such is the way of the artist. He will do it differently breaking with tradition.

This picture is not an unkind one. Perhaps this idea of straight photography appeals to you. In its own way, it's as much fun and as exciting as a pin-up or glamour shot.

give a silhouette-like appearance, darkening the skin and robbing the hair of vitality. Yet, a head done out of doors with the same sky but against a dark background has a luminous flesh tone and is free from the murkiness which a white sky produces on the skin. Portraits done in sunlight at noontime, or when the sun is still very high, illustrate the most disagreeable aspects of unskillful lighting, with raw contrast, heavy shadows under the nose and chin, and eyes burned out. If he cannot choose his time, it is better for the photographer to use a photo-flood lamp which will move at his will.

Indoors, in a room where the presence of numerous objects tend to disturb the unity of composition, a portable background can be sometimes used—one which rolls up conveniently when not in use, and when used, hung on a wall or over a screen in the most advantageous light. Placed on castors, a plain background can be easily made which shifts into any desired posi-

grapher
f-naked
tattooed
couldn't
ul, like
Grand
ck this?

but as
This is

ousands
er their
ful sub-
ater, or
36's, of
g in the
s look-

shocker
things
ubjects
teeth.
nt. He
dition.
erhaps
eals to
and as

arken-
vital-
th the
ound
from
duces
ght at
very
eeable
raw
nose
e can-
r the
lamp

sence
b the
back-
which
, and
reen
ed on
easily
posi-



DO YOU HEAR the old gentleman saying: "Now don't touch anything! I know exactly where everything is." Note the 1932 calendar wilfully left hanging; the misarray background and the old couch kept in fine repair. Here is straight portraiture—without benefit of eye-lid shadow. God save you from him if you tried to put it on.

tion. In the print of the reclining gentleman, Manuel Duarte, the background is certainly cluttered, but it is in such harmony with the entire mood of the photograph, that the interest in the picture itself would have been less had the man's environment not been included.

It cannot be said too often, that the finished print must be kept in mind from the moment of exposure. There is no arbitrary rule that all of a negative should be used. But it is rarely necessary for the portrait photographer to work under such conditions where the use of the full negative is not the obvious choice. To retouch a negative, beyond the removal of a temporary blemish, at once defeats the con-

sistent effort of the photographer to obtain the maximum tonal variations and color from his negative. Besides, it is a synthetic approach.

Sunlight proofing-out paper is an excellent guide to show the potentialities of the negative, and if fully printed, will yield all the gradations possible. To work consistently, a paper of long scale and smooth surface should be used in printing; cold, rather than warm in tone, so that the paper color does not obtrude. Printing must be done with minimum manipulation so that none of the negative tone is lost. Manipulation of negatives and prints results in as great an emotional difference to the finished work, as transposition of a

(Continued on page 104)



RUGGED

ED REA

FROM THE PICTORIALISTS IN AND AROUND

San Francisco

Just 42 years ago, in January, 1903, Alfred Stieglitz published the first issue of *Camera Work*, a quarterly magazine that continued for 14 years and is still quoted today. Since photography was so very young, and continually brushed off by art museums, and even by artists themselves, Stieglitz published *Camera Work* in a format perhaps more suitable to a millionaire's quarto of Shakespeare.

The reproductions were tipped in on hand-made translucent paper, backed with a specially made cardboard that gave just the right tone. Text pages, deckle edged, made each copy look like a volume of today's Limited Editions Club.

But the text itself was forthright. Stieglitz broke with the Royal Photographic Society (he

was also read out of the New York Camera Club) and championed 100% American pictures that did not have their birth in an English painting, pentameter or perambulator. That's why, at places such as the Museum of Modern Art, he is regarded as a latter day saint, and even his lesser pictures are kept in aluminum frames, wrapped in cotton. It's the idea that Stieglitz gave us that matters so much and the idea itself is so very wonderful and so completely American that no wonder the aura of it carries over into the very footsteps of the man.

The text, on the next two pages of this portfolio of prints by present-day Californians, is reprinted from Volume I, Number 1 of *Camera Work*.—ED.

GAY 90's

RALPH WILLIAMS



WHAT are the requisites of good pictorial work? They are sincerity, feeling, taste and technique. And imagination; yes, of course, all one has to spare of it, but not fancy; beware that rainbow-chaser. One might add originality—at least in treatment. . . . If no two noses are alike, is not each nose an original work showing "repetition with slight variation?" But to be more serious: if the worker be sincere to self and to subject, he probably brings new matter or new treatment to the field of art. . . . If he also shows feeling, he pretty surely

does offer something at least a little different from anything done before; and if he is guided by good taste, what he brings is probably worth respectful consideration. But without good technique, which is his art-language, he stammers and cannot express himself clearly. Stutterers are not winning orators; moreover there is a charm in mere execution when it is good. Where would many of our modern painters be, otherwise?

But some industrious photographers never accomplish anything worthy of a moment's consideration. If they are sin-

DEATH VALLEY

GRANT DUGGINS



different
and if
brings
ation.
is his
not ex-
re not
is a
good.
paint-

aphers
of a
re sim-

IS



PASSED OUT COLD

JACK WRIGHT

cere, taste is usually the vital attribute immediately lacking. They were not born to it and they have not cultivated it. As for the insincere; when cheek takes the place of taste, and self-conceit of feeling—what results may we expect! And if certain kinds of photographers seem ever unsatisfied and unhappy—not with their work, mind you, but with the estimation in which it is held—it is because they are working for achievements which they do

not achieve, and a standing they can not stand for. "Oh, why am I so beautiful?" exclaimed the repulsive Katisha.

These artists . . . are out cup-hunting; it is delusive hope that keeps them working, and not any real love for, and pleasure in, the execution of their work. Such can not understand what art really is, for they can not comprehend the joy of the artist in putting the best that is in himself into his chosen work.



MONDAY

K. V. ARNTZEN



ZEN

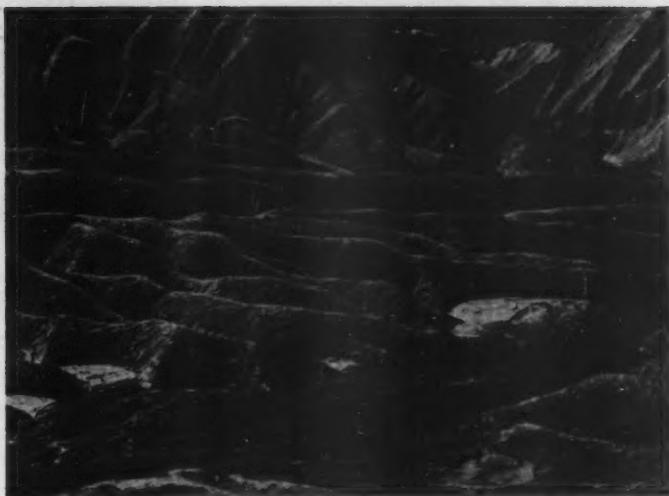
AMARYLLIS LILY

DOM CHIESA



TIM AND DUSTY

DOROTHY LINEER



CONTOURS

E. C. ADAMS

PARDNERS

FRANCIS S. ROBSON

ER



WHY DIDN'T SOMEONE TELL ME?

By RAY BARRETT

I HAVE just completed my first indoor Kodachrome pictures and now admit, I'm the only man in America with ten thumbs. I wonder if there are other beginners, like myself, who failed to get much out of advice from professionals because they have forgotten all the little things we want to know. I now can tell you the things the instruction booklets omit, "because we are all supposed to have common sense and know them anyway."

Well, I didn't.

First, there are two kinds of 35mm. Kodachrome—one for outdoor shots; and one for indoor shots, called Type A. The latter comes in an 18-exposure roll and costs \$2.77. That came rather as a shock, but the price does include processing.

The speed of Type A Kodachrome is so slow (12 Weston) that you need artificial light for indoor shots. My photo dealer, no brighter than I, although he has been in the business some eighteen years longer, sold me blue photoflood bulbs. Light from these bulbs turned my Kodachromes toward the blue side. For *indoor* Kodachromes, using Type A film use any regular white photofloods. The larger ones No. 2 are to be preferred. They cost me 35 cents each and last 6 hours. You can use next size larger, if available.

These bulbs get terribly hot. If you put them in a lamp that has a paper holder, close to the bulb, it will burn the paper. If the bulb is close to the wall paper, say one and a half inches, it will

scorch it. I can prove that statement.

It's more fun, and you get a bigger kick out of the whole thing, if you have a tripod. I bought one from Willoughby's for \$19.50, called their Victory model. Like everything else called a victory model, it sullies the fair name of victory. This tripod is everything anyone wants, but it is made of heavy metal. It's more for a



warrior than a photographer. But with it, you really feel that you are going someplace as you tilt the pan head this way and that. The tripod is good and rigid, but if it ever falls, pick up the children first. My tripod is the thing I'm proudest of right now.

When you shoot with Kodachrome indoors, an exposure meter will help, and if you are taking a picture of the kids, as I was doing, you take a reading about ten inches from the kid's face, being careful not to cast a shadow, or to stand in front of the light source. If the wall paper is light, if the furniture is light, if the drapes and coverings are light, you compensate for all that by using a faster shutter, 1/75 instead of 1/50; or a smaller lens opening, f/8 instead of f/5.6. If the surroundings are dark, compensate the

WHEN USING a light meter, take a reading about ten inches from the subject's face being careful that the meter isn't casting a shadow on the area where you are taking the reading.

For Type A (in-door) Kodachrome set meter for a film rating of Weston 12.



other way with more exposure.

No matter how good your meter is, shoot around your subject just to be sure. That is, try it first at $1/5$ at $f3$, then $1/5$ at $f2.5$, then $1/5$ at $f3.5$. The closer your light to the subject, the brighter your subject (that much common sense I had, too), but also, the darker the shadows on the other side. A second light will fill in some of these shadows. Ansco and Eastman both sell cheap cardboard reflectors that direct these photofloods on the subject. A metal one is better yet, for these reflectors concentrate your light most efficiently. With one light 3 feet away, and another 9 feet away, I was shooting at $1/10$, $1/2$, and one second, at $f4$, $f5.6$, and $f8$. Kodachrome is very slow. It is about one-fifth as fast as Eastman Super XX or Ansco Superpan Press.

For backgrounds use simple, solid colors. Green is a tough color for the amateur to register perfectly for it often turns out muddy. Sharply contrasting, simple colors go better than rainbow effects. A bright yellow background is better than a plaid, and bright red is better than a fine Oriental rug.

Before you place and arrange the

model, place yourself in the model's spot and see what it's like. You may be better able to suggest poses to the model and understand how bright the lights are to her eyes.

When shooting in color, you should think of your picture two ways: first, arrangement of the subject, and second, the composition of the color masses. On my first roll, I was hesitant about getting the camera close enough to the subject. I backed off some ten feet. My subject occupied about one-fifth of my negative and



the rest of it included an open closet door, half of a window, and a bed post. Later, I wasn't afraid (it's surprising how shooting \$2.77 to the winds gives you courage) to get within 4 feet of the subject.

When my family stayed in the room to help out with their comments, it made me an unwilling partner to a vaudeville skit. Next time I shooed them out. The professionals tell you, "it's better when the subject is doing something." They're right. Looking straight into the camera doesn't come under the head of "doing something."

To use color for all it is worth, see your subject as an arrangement of color masses. If that design is pleasing, you'll do a nice job. Eastman develops and cuts up your Kodachromes into frames, mounting each one separately in a cardboard frame.



• SO NEAR AND YET SO FAR

by

Andreas Feininger

Pictures by the Author

The beauty and technique of telephotography.
Feininger shows you how to build a long-distance camera like his \$84 home-made model.

I AM a photographer by profession, but photography still is my hobby. To be more exact—experimental photography. I like to see in photography, not simply a mechanical means for reproducing everyday views of everyday things, but a process rich in creative and educational possibilities leading to entirely new fields of vision. Where natural limitations stymie the human eye, photography carries on. Close-ups and super close-ups, down to distances of fractions of an inch, reveal details, forms and textures hidden forever from the naked eye; infra-red sensitized emulsions penetrate the veil of haze and fog, disclosing camouflages and forgeries,

SEVEN MILES AWAY, the tall shaft of the Empire State Building soars above a dingy clutter of houses in New Jersey like a fabled tower of some ancient race of giants. Feininger took this dream-like telepicture from the Moonache Road, New Jersey.

THE TELEVIEW (*opposite*) of Radio City was made in Weehawken, New Jersey, $2\frac{1}{2}$ miles away. It suggests the sheer bulk of New York as no ordinary short-focal shot could, preserving perfectly the natural proportions of each object shown. This picture compresses more than one and one-half miles of city structures without distortion, from the docks in the foreground to the General Electric Building on Lexington Avenue (the last tall building at the left).



phy.
-dis-
odel.

but
o be
gra-
sim-
icing
ut a
onal
ields
ymie
on.
dis-
de-
ever
ized
and
ries,

Em-
utter
er of
took
ache

was
miles
York
rving
object
one
hout
ad to
ngton

HOTEL
TAFT

FRENCH LINE

and permit pictures to be taken in complete darkness by means of "invisible light;" high-speed shutters, and speed-lights freeze split-second action into needle-sharp immobility, portraying bullets in full flight and analyzing explosions; X-rays penetrate the heaviest metal castings, leaving records of structural perfection or flaws on photographic film; telephoto lenses conquer distance and disclose features no unaided eye could ever perceive, recording them on film for leisurely and thorough study; and so on. Approached in this spirit, photography becomes the most inviting and adventurous of all hobbies, challenging ingenuity, imagination and creative ability alike and promising exciting discoveries in reward.

TELE-PERSPECTIVE

For more than ten years I have been experimenting with one or the other of these more advanced forms of photography, but my true love has always belonged, and still belongs, to tele-photography. Tele-photographs have always attracted me so much, not merely because they bring distant objects closer, but because they present such distant objects in a form of perspective which is singularly free from distortion. In an "ordinary" photograph, things close to the camera are invariably rendered larger and more provocative than objects farther away, even if these nearer objects are comparatively small and unimportant with regard to the more distant ones. Everyone knows that the shorter the focal length of a lens with regard to the size of film it has to cover—or the wider its angle of view—the more pronounced will be such a distortion of perspective, reaching a climax in "wide-angle shots." Pictures taken with lenses of relatively long focal lengths are always freer from such unwanted perspective distortion (the reason why we prefer such lenses for portraits), and certain extreme tele-photographs are practically free from it, preserving the beauty of natural proportions almost as well as an architect's "elevation."

Thus, if objects are small and unimportant, they will be rendered small, and if they are big and dominating, they will be

rendered large, regardless of their distance from the camera. The teleshot of Radio City from across the Hudson River clearly proves this point: The low buildings along the waterfront still look low, and the towers in the distance still dominate the picture, despite the fact that some of them were about 2½ miles away from the camera (the General Electric and the Waldorf Astoria buildings left and right of the RCA tower in the center of the picture), three times as far as the docks. Such concentration of space produces an overwhelming effect of mass—an "extra-reality" which is beyond the scope of the ordinary camera. It is this unique property of compression without distortion which compels one again and again to explore the as yet uncharted field of long-range photography, and which offers the venturesome amateur new opportunities for thrilling technical and esthetic achievements.

TIMELY TELEPHOTO LENSES

Unfortunately, most amateur photographers consider tele-photography as something out of their reach. They have heard of the "Big Berthas" of news photographers and their awe-inspiring costs, and they know how very expensive telephoto lenses for miniature cameras are. Besides, right now, none of this equipment is generally available to the average amateur. This is true, but it isn't the whole story.

FEININGER has set up his telecamera to shoot that barely visible skyline.





FROM THE TOP of Ridge Street in Lyndhurst, New Jersey, you can barely see the skyline of New York City, eight and one-half miles away. Now look at the picture below.

THIS IS THE WAY the New York City skyline from Lyndhurst leaps into view in the space-annihilating eye of Feininger's 40-inch lens. The building on the extreme left is the Radio City skyscraper at 51st Street; on the extreme right, the Empire State Building at 34th Street. The needle-pointed structure almost dead-center is the Chrysler Building at 42nd Street. Feininger made this shot at 5:17 in the late afternoon. Technically and esthetically this tele-closeup is a masterpiece. The dark middle area, highlighted by a silvery coil of the Hackensack River, anchors the tall verticals of the skyscrapers to the composition, pulling them into balance with the beautiful pattern of chimneys and gables in the foreground. For another dramatic "close-up" taken later in the afternoon turn page.







For there are always quite a number of old-fashioned lenses of long focal-lengths on the market, which many of us overlook only because of their antiquated appearance and their usually slow speeds. This, plus the fact that most of them are mounted in barrels and have no shutters, forces the dealers to put relatively low prices on them, so that a photographer who knows his lenses and prefers perfect definition and long focal length to flashy looks and high speed can still pick up amazing bargains. A few weeks ago, for instance, I bought (in New York City) a symmetrical Ross lens No. 12 with a focal length of 21" for the complete system and 40" for each one of the elements, for twenty-five dollars. Tests revealed that this lens which has an opening of f:15 and still uses Waterhouse stops, cuts as sharply as any modern anastigmat, and that not even a dark red filter will throw the image out of focus. So I decided to keep it and build a camera around it.

CONSTRUCTION OF A TELECAMERA

No lens with the tremendous focal length of 40 inches can be fitted by means of extension tubes to ordinary equipment—like a 4 x 5 Speed Graphic or Graflex—since the lensboards of these cameras are much too small to permit the cutting of holes big enough to avoid "vignetting" of the corners of the image on the film. Instead, a complete new camera had to be designed, with special emphasis on rigidity to resist vibration caused by wind, since this powerful lens would magnify even the slightest and ordinary harmless movements of the camera or parts of it to a degree large enough to cause decidedly unsharp pictures. Compared with a standard Speed Graphic lens, a 40" lens gives a seven times larger image, reduces distances from camera to object to one seventh in the picture, and is seven times more sensitive to movements of either camera or subject.

The main body of my telecamera consists of two rectangular wooden boxes, one sliding inside the other. The outer dimensions of the inner box are about a quarter of an inch smaller all around

than the inner dimensions of the outer box to guarantee friction-free movement; light-tightness is insured by two half-inch wide, velvet-lined wooden frames that fit snugly into this air space, one of them screwed to the inside of the front end of the outer box, the other one attached to the out-side of the rear-end of the inner box. Two cardboard baffles inside the inner box effectively prevent stray light reflected from the walls of both boxes from reaching and fogging the film. Focusing is by means of an ancient 9x12 cm view-camera that has been lying around on my shelves for years, and which I bolted to the rear end of the outer box. Here again, rigidity had to be guaranteed under all conditions, this time by means of a brass rod sliding over the top of the view camera through two bearings, one screwed to the rear end of the outer box, and the other one fixed to the rear end of the view camera, which can be locked in any position after focusing.

The lens, fitted into a second-hand Ilex shutter that was more difficult to get hold of than the lens itself and almost as expensive, screws into a ring at the front end of the inner box. Fully extended the camera measures 45" from lens to ground glass, fully compressed 21", the minimum length required for a lens with a 21" focal length. It is fitted with a back for standard 4x5" Speed Graphic film holders, weighs about 5 pounds without the lens and is constructed throughout from non-essential material (mostly plywood) and old parts, available to anyone at any time. Complete with lens and shutter and expenses for a few small fitting jobs that I couldn't do myself, it cost me around \$60. The fact of its completion proves that even at a time of extreme shortages like the present, photographers still can carry on.

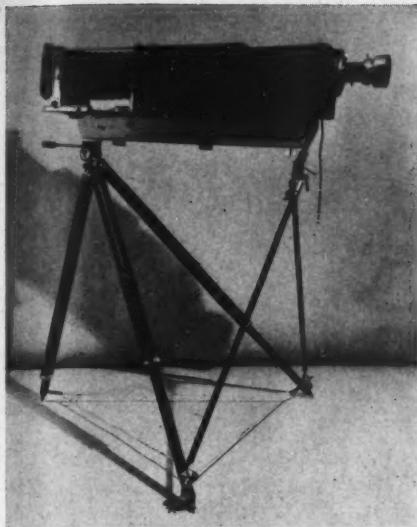
THE CAMERA SUPPORT

A camera 45 inches long cannot simply be screwed to an ordinary tripod, even a very heavy one, and be expected to stay there motionless; already the slightest draft would make both front and rear

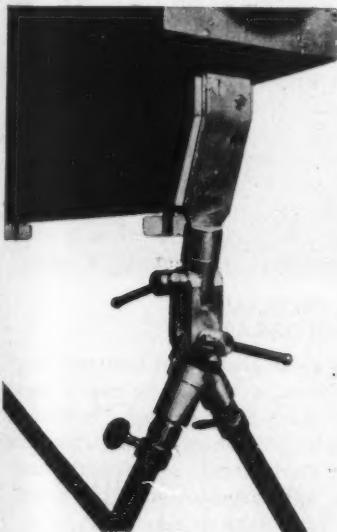
uter
ent;
inch
t fit
hem
d of
d to
inner
in-
re-
rom
sing
view-
on
al-
Here
nder
of a
view
wed
the
any

Ilex
hold
ex-
front
l the
ound
num
21"
k for
hold-
the
(from
ood)
any
utter
jobs
me
ction
reme
sphers

mply
even
o stay
ightest
rear

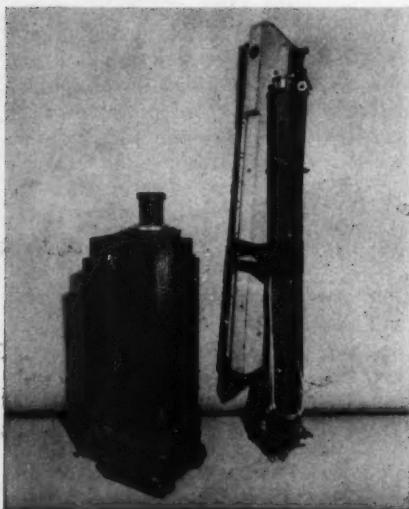


DETAILS of Feininger's telecamera and "five-pod." Reading clockwise, one of the homemade Warterhouse filter stops fashioned from thin black cardboard. A universal ball joint gives Gibralter-like stability to the legs of the "five-pod." The brass rod sliding through two bearings firmly secures the old view camera through which Feininger focuses. The only part of the "five-pod" which had to be made by a mechanic was the double-jointed metal fork shown below.



ends vibrate and quiver visibly. A long job like that has to be supported firmly both front and back, so my next problem was to design a special tripod. This had to combine two-point support with rigid strength, lightness, and simplicity. Better than long descriptions one glance at the accompanying photographs will show what I finally constructed: A "five-pod" consisting of a heavy "backbone" held up by two supports in front and three supports in back, all of them joined together into one triangular, three-dimensional, rock-steady girder construction. The three end supports consist of a regular wooden tripod, the two front supports came from two discarded lamp stands, aluminum rods sliding inside steel tubes, joined with the tripod legs at their lower ends with Eastman universal ball joints, and fastened to the "backbone" by means of a special double-jointed fork, the only part of the whole construction that I had to have made by a mechanic. The whole job folds together compactly, takes only a few seconds to erect, and is strong enough for two men to sit on. It cost me, including the price for the wooden tripod,

WHEN NOT IN USE, the telecamera and the "five-pod" fold up in easy-to-carry packages.



the universal joints, and the making of the double-jointed fork, just \$24. With the cost of my camera added, my entire telephoto equipment—runs to only \$84, and it would take several hundred dollars to buy the same equipment new, if it were available.

THE COLOR FILTERS

The longer the focal length of any lens the greater its magnifying power, so that more care and accuracy have to be exercised in its use since every mistake will be magnified, too. This applies to focusing, determination of depth of field, and rigidity of support as well as to the quality of the color filters used, which must be of the very best, or unsharp pictures will result. Testing my newly acquired lens for sharpness of definition I soon found out that every one of my color filters produced more or less pronounced unsharpness, the red filters as well as the yellow ones, and the filters made of solid glass no less than the cemented ones. Unmounted gelatine filters, however, didn't mar the perfect sharpness of the unfiltered image at all, which proved that not the color of a filter, but its mechanical perfection or rather imperfection, was to blame. Once the cause was found, the remedy was simple—since the lens used Waterhouse stops that fit into a slot in the lens barrel, I hit upon a new combination of stop and filter. Out of the double-folded, thin black cardboard, I cut new Waterhouse stops, and between the double cardboard I cemented pieces of red or yellow gelatine filters covering the hole of the diaphragm opening. 11x14" enlargements from negatives taken through these filters were still perfectly sharp.

SPECIAL PROBLEMS IN TELE-PHOTOGRAPHY

Taking clean, sharp, and contrasty long-distance shots is technically much more involved than getting good "ordinary" photographs because of three factors not otherwise encountered: atmospheric haze, vibration, and turbulent air. It is a well-

(Continued on page 106)

he
he
le-
nd
to
ere

ens
at
er-
ill
us-
nd
ity
be
ill
ens
out
ro-
p-
ow
ass
Un-
n't
fil-
at
ni-
was
the
ed
in
ha-
ple-
ew
ple
or
ple
en-
gh

ng-
ore
y"
not
ze,
ell-





THE BLACK HAT

A FOLIO OF COLOR FROM
WILLIAM MORTENSEN

The Mortensen Metal-Chrome process involves no new principles, but is simply an ingenious combination of old procedures.

Chemical toning is, of course, a fairly venerable and well-known process. Substitution of various metallic salts for the black silver deposit in a photographic print produces a wide variety of colors. Metals used in this way include vanadium, gold, uranium, copper, iron, and a number of others. Colors range from the familiar sepia of a sulfide print to the Chinese red of gold and the cerulean blue of iron. As ordinarily used, chemical toning is employed to produce a simple monochrome version of the entire print. But used selectively and in combination, the various metallic tones afford the possibility of a fairly wide range of color. In practice, however, combinations of tones run into a variety of snags. Some metallic tones, for example, exercise an intensifying action; others act as reducers. And some combinations are chemically incompatible.

Through a long series of experiments and eliminations, Mr. Mortensen arrived at a method of combining certain chemical tones in a single print. The procedure has been designated as the "Metal-Chrome" process. Because of its critical nature, the process has not been made available to the public, but has been reserved for Mortensen's students.

Comparison with other methods of making color prints reveals some outstanding advantages of the Metal-Chrome process. In the first place, it is a single shot procedure, derived from a conventional black and white negative. There is, therefore, no problem of registration nor any possibility of parallax as with split negative processes. Speed of the Metal-Chrome procedure is superior, both in point of exposure time and in time required for making the colored print, which may be completed within an hour. The metal-tones are thoroughly permanent, as compared with the fugitive character of the coal-tar dyes which are the source of color in three-color carbro, imbibition, wash-off relief, and various other methods for producing colored prints. The Metal-Chrome method imposes no limit on size or paper surface. An 11x14 three-color carbro represents a technical tour de force, but a 17x20 Metal-Chrome print is as readily made as an 8x10. The paper surface may be glossy, matte, semi-matte, smooth or rough, as is desired.

Colors in Metal-Chrome are delicate rather than stridently realistic, and are therefore particularly well suited to portraiture.



2007
S-62/26



MOROCCO



YOUNG GIRLS OF THE PUEBLO

FROM south of the border comes another interpretation of warm country natives.

ANTON BRUEHL

★ LIFE IN THE FAMILY ALBUM

BY DON MOHLER



THREE are lots of reasons for taking pictures, not the least of which is to put life into the old family album. No matter what your other interests are in using the camera, the time comes when you want to make record pictures of the family.

If you do the job the lazy way, and just take the family out in the sunshine and stand them there to be snapped, the results are hardly something to be proud of. If you try to get pictures that tell a little bit about your people and their surroundings, you find that your difficulties are in inverse proportion to your experience.

Well, hardly anything worth doing with the camera is quick, easy, and sure-fire. But there are a few simple tricks anyone can use right around home, which are quicker, easier, and more certain to succeed than most.

A picture is vital and interesting when it tells a story. And it isn't when it doesn't. That is why so many collections of family snapshots are deadly dull. If they tell any story at all, they simply state that Dad and Mom and Sue and Johnny look like this if you stand them against the side of the house and take a shot of them.

But what else can such pictures tell, when we take people who live and work and play and love indoors . . . whose whole existence, except for getting from one place to another, is spent within walls . . . and we always drag them outdoors to "have their picture took?"

Take 'em alive! . . . at work, at play, doing anything characteristic, outdoors

and indoors. Then you've got something!

For example: Take a chair. Everyone sits in a chair. Differently. Doing what? Reading. Napping. Knitting. Or just sitting. Well, take a picture of it, and you will have something more characteristic of the individual than if you snap him in the sunshine where the most likely action is staring, or squinting.

How about lighting a picture of a person in a chair. How are they usually lighted? With a floor or table lamp. Okay. Put a photoflood or photoflash lamp in

WOULD you like pictures such as this, in your album? It can even be done with most box cameras, by placing a flash bulb in a floor lamp and setting the camera on bulb. The procedure is: 1. open shutter, 2. flash bulb, 3. close shutter.



place of the regular lighting lamp and use it for your picture. Pull the lamp in close to the person. With fast film in the camera, make a twenty-fifth of a second snapshot, if you are using a flood lamp. With flash, use the "open method." Set the camera for Time or Bulb, put it on a solid support, and when ready, open the shutter, flash the lamp, close the shutter.

A shot of this sort is especially good if the light is coming from the side, or back of the subject, and a table top with a light cover, or a large open magazine is used in its natural location to reflect some light back into the shadow side of the face or faces.

An almost identical picture, except for the location, is one made of the bath. This is particularly suited to pictures of children, although if you are lucky enough to have an appropriate model, it is effective with adults, too.

It is very nearly impossible to get really bad lighting on a person in a bathtub, if you will use a single light and keep it high and to one side. Do not use flat lighting with the lamp right at the camera. (In fact, never use such lighting for pictures of people, unless convenience or necessity makes it unavoidable). With side-lighting, the reflective interior of the tub will bounce light around so

that the shadows will be luminous.

Soapsuds look sudsy in this simple lighting. If you want to confine your shot to those features from the neck up, buy some of this bubble bath stuff . . . use it in a deep tubful of water . . . and go ahead. Exposure is as simple here as it is in the chair shot. If you want expression, flip water into the face of your subject just before making the exposure.

Warning: When taking pictures of kids in the bath, watch out! They splash.

Extra Warning: You'll miss some of your best shots if you let a little splashing bother you.

For real action, however, there's nothing to beat synchronized flash . . . especially outdoors in the sunshine. If you own a synchronized flash camera, do not confine all your shooting to indoor stuff. Many news photographers shoot a photo-flash lamp on every shot, indoors or out, day or night, and some of their best jobs are made outdoors in the sunshine.

The reason why this particular kind of shooting is a cinch, is that regardless of your distance from the subject, or the existing daylight, you do get something. If the daylight is weak, or your camera and lamp are quite close to the subject, the flash will overpower the daylight, and the shot will look as if it were made at



BULB in floor lamp is fired by extension.
Left: Newspaper reflects light into faces.
Above: Light walls, tub illuminate shadows.

night. But you'll get it!

But if daylight is strong and you are a considerable distance from the subject, the shot will look as if it were made entirely by natural lighting. The flash will "be there" in the shadows, regardless, and you will still get something.

All of which adds up to relative freedom from the existing light. And particularly, it allows you to pose your subjects with the sunshine hitting them from the back or side, rather than in the eyes. Therefore, they can go ahead with whatever simple action the picture calls for, and when you trip the shutter, at the peak of action, the expressions will be natural.

Exact control of the balance of lighting between the flashlight and the daylight, is possible. It is the kind of control that the expert photographer uses for sparkling results, in black and white, and notably in color work. That's somewhat outside the limits of what we are talking about here, and no cinch.

But a synchronized flash outdoors in the sunshine is a cinch for *some sort* of

photographic result, . . . that tells a story, regardless of light, weather, subject matter or action. You haven't a flashgun yet?

You can come close to doing the same sort of thing on a sunshiny day, using a white bedsheet, or a sun-drenched light wall for a reflector. This suggestion has been made so often, and tried so little (except by men who make a living out of photography) that it leads to the suspicion that few families have an extra sheet.

So . . . with no flashgun . . . no sheet . . . or maybe no inclination to take the time and trouble to work a little bit for the best possible lighting outdoors, you can still get a shot that is a cinch, if you will place your subject sideways or backwards to the sun, and give plenty of exposure.

The technique is so successful, that many professional photographers refuse to make planned pictures outdoors in the sunshine, except early in the morning or late in the afternoon, when they can take full advantage of slanting light, and shoot from the shadow side.

Early morning, or late afternoon light is



TAKE ADVANTAGE of slanting morning or afternoon sunlight, and nearby reflecting walls, if you have no flashgun to lighten shadows.



IN OPEN SHADE subject will not squint and eyes show natural catch light. Fast film in box cameras, gets pictures in bright open shade.

ory,
tter
et?
me
g a
ight,
has
ittle
of
spira-
eet.

...
me
est
still
ace
the

hat
use
the
or
ake
oot

it is

and
box
ade.



FOR FIRESIDE pictures, place lamp in corner of fireplace, out of camera view. Subdued room lamps may be left on, so subject may be watched, as flash will overpower room lighting.

generally better for snapshots, in fact, better, than full harsh mid-day sunshine. Modern films are plenty fast for such light, even though the day is somewhat (in fact, preferably) overcast.

Another cinch shot is a silhouette. May be the real reason for its success is that it always looks like the person. Expression, which makes or breaks the usual picture of a model is not a factor in a silhouette. If grandma hates to see her wrinkles, if sis always plasters on too much makeup, if junior mugs . . . try silhouettes.

One simple way to make them, is to suspend a sheet across an open doorway. Place the subject, in profile, on the near side of the sheet and a photoflood lamp on the far side, shining directly back toward the sheet. For best results, the camera, subject and lamp should be in line, so that the subject's head blocks the spot of brightness produced by the lamp.

At snapshot shutter speeds, there will not be enough detail in the near side of the subject's face to produce anything but a silhouette.

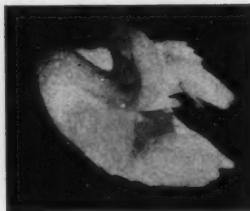
For action silhouettes, of pets, lively children, or people in different poses or action . . . photoflash, combined with high shutter speed (using the flash behind the sheet on an extension) does the trick.

Before you put your camera away next time, make at least one fireplace picture. For a fireside effect, put the lamp right in the fireplace, face the subject toward it, and keep the room lighting quite subdued. Here's one picture, in which deep black shadows away from the light, are wanted.

Try some of these picture controls. Plan your shots ahead. Know what effect you are after. Work a little at getting it. Keep it simple. This is the best possible insurance for getting the picture you want, when you want it.

réunion in Chicago

an investigation into the work of L. Moholy-Nagy



LASZLO MOHOLY-NAGY, nicknamed Holy Mahogany by his students, has been in this country since 1937 directing the Institute of Design, in Chicago. This school, with an annual enrollment of 750, places in the American photographic stream the revolutionary picture ideas that have made Moholy, wherever he lives, the imperturbable subject of feuds, angry resignations, and devotion. Moholy's students leave the Institute of Design with radical ideas of what is good and what is bad about photographs, and they act like disciples about it.

A score of his students now teach photography in colleges and universities, where they carry a hot torch for the Master. The latest to go forth to save students from ham, corn and Dixie is Lillian Garrett who will teach at the University of Wisconsin. Moholy's influence, flowing regularly into American photography, is one of experimentation and liberation from the standards of another day.

Just like the Americans, Alfred Stieglitz and Paul Strand, Moholy-Nagy started his photographic career by being mad at something. Good and mad. The theory that Great Art stems from Great Rage, plus a desire to be different, proves itself, at least in the lives of these three men. Moholy was mad at every picture that looked like an imitation of Whistler's "Mother," at every song that cursed to the sentiment of "Mother Machree," at

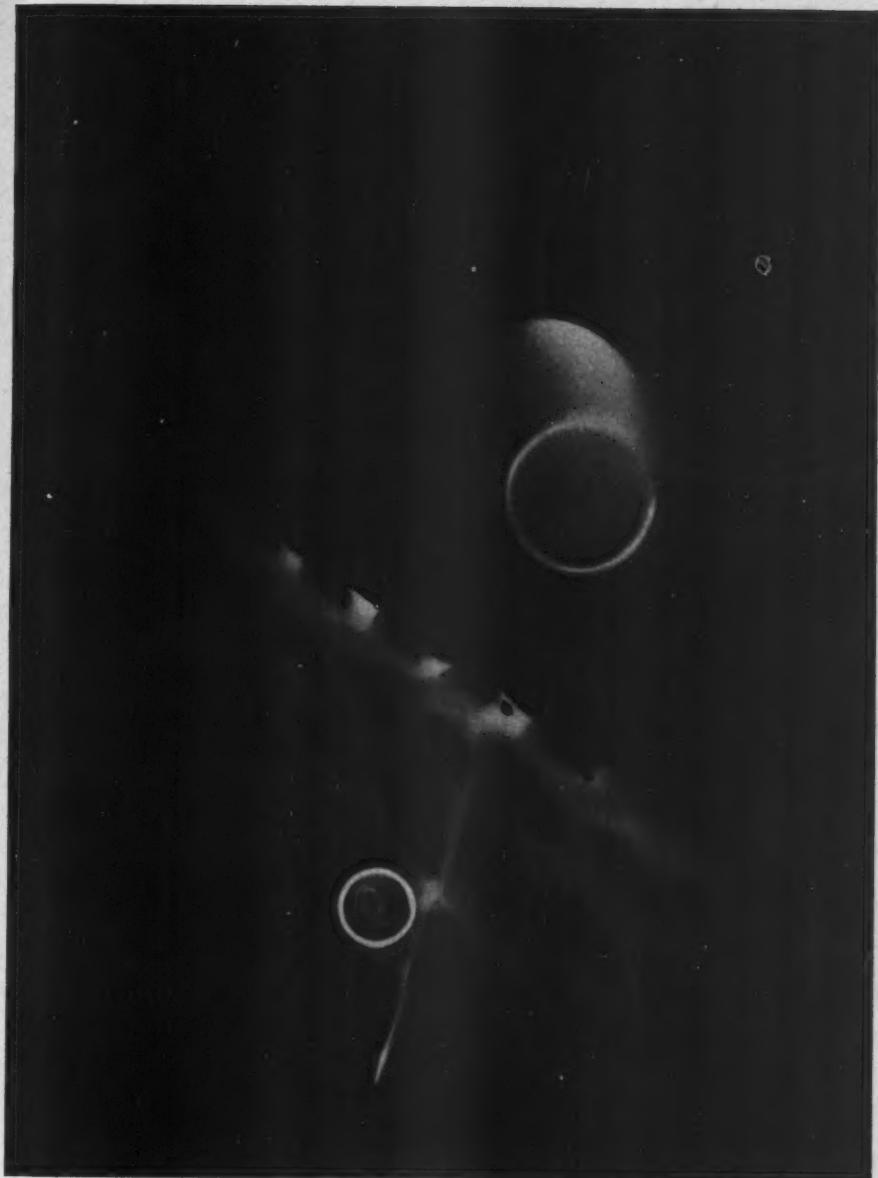
every photograph hung in his native Hungary titled "Morning Mist," and at every portrait photographer who, as though obeying some law of physics, held his camera five feet from the ground when taking a portrait.

Copy-cat art made Moholy as furious in 1915, when he turned from law to painting, as it made Stieglitz when he founded the Photo Secessionist movement as a revolt against imitating photographs which in turn were pale imitations of the real thing.

Revolt, alone, against the dead past, is not progress. Moholy accompanied his revolt with ideas of how to do the same thing better. Whether his own photographs, some of which are illustrated here, do the job better, or the best way, is a moot question. They have stirred other people to try new ideas, to size up, objectively, the standards they previously had. Around 1923, an exhibition of the Moholy photographs (pages 68, 69, 71) became a storm center, but won him a professorship at the Bauhaus school in Germany, the school from which so many of our present ideas of modern architecture, painting and furniture have come.

It was while at the Bauhaus that the poet, Schwitters, came into Moholy's class one day, and saying he had a new poem to read, handed Moholy a piece of paper with the letter "W."

Moholy looked at the "W" and said,



PHOTOGRAM

LASZLO MOHOLY-NAGY

"But, Schwitters, how can a "W" be a poem?"

Schwitters slowly raised a guttural sound from his throat and climaxed it by a sudden loud and bold bark. Schwitters, in effect, was capitalizing on the vocal possibilities of the single letter "W" to create a new poem. Schwitters, in a sense, was clearing his artistic throat. Today Moholy still tells this story in his lectures.

The faculty of the Bauhaus, composed of Walter Gropius, Wassily Kandinsky, Paul Klee, Joseph Albers, Lionel Feininger, is a roll call today of the great men in art of the 1920 period. Moholy taught a preliminary course, which dealt with experimentation into texture, and structural possibilities of various materials. It is in this connection that we can see the influence of the Bauhaus on photography, for the photogram Moholy developed is essentially an exercise to discover and experiment with photographic textures.

The Bauhaus building, at Sessau, was designed by Gropius. The architect made use of glass, concrete, skeleton steel structure and other new construction techniques to create an impression of a mass hovering in space.

The Bauhaus was designed to be viewed from all angles. We can easily see how this idea of space-time affected Moholy's photography. For it is in this period that Moholy first thought of taking photographs from new angles. Many of our 1944 "angle shots" are direct descendants of his early experiments. His new visual point created new connections and strange beauties. Considering an object in a relation other than a straight front angle is one of the most important traditions in photography we have inherited from Moholy.

II

When Moholy came to this country in 1937, his idea was to carry on the tradition of the Bauhaus. In the old Bauhaus, Klee, Feininger, Kandinsky were painters, and Gropius was an architect. Moholy wondered if they lacked a unity of

approach and began to think that an instructor must know all the arts and crafts to be the best teacher. He teaches his students at the Chicago Institute of Design that photography is better understood in conjunction with such things as pure color, hand wood work, mechanical drawing, line, form.

Moholy emphasizes experimentation. A young student was working in color one day. With meticulous care he would lay a cerulean blue next to its complimentary yellow. A nice effect came out, but it lacked the visual pep that the other students were getting. Moholy came over to the student's bench and then explained what he "was doing not right." The student seemed to lack the ability to experiment. Yet the student, a stranger to painting, barely knew how to apply painting, much less how to experiment. Moholy realizing this, took a thin wash of blue, of yellow, of green, of carmen red, and splashed them on the paper. The washes were so thin that the colors ran together. The blue mixed with red, the green with the yellow and red, the blue with the green. The student was now aware of what experiment meant, for here he was studying what happens when these colors mix.

Moholy showers his students with confidence. One day, coming upon a young lad, who was shooting a falling ball at a tenth of a second, he said, "How daring!"

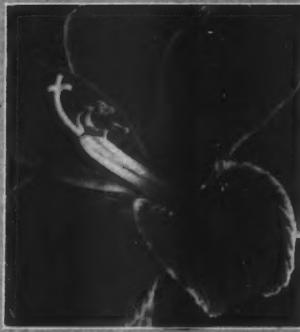
The most telling criticism levelled against Moholy is that whenever his faculty or students successfully mirror him, every one is happy; an anomaly about themselves most teachers humanly ignore.

Moholy-Nagy regards photography as an instrument, like the telescope, for exploring space and time. He delights in discovering through shadowgraphs, negative prints, and vertical perspective, the disquieting relations of objects. He once listed eight different ways of seeing photographically:

1. Abstract seeing (shadowgraphs)
2. Exact seeing (reporting)
3. Rapid seeing (snapshot, press high-speed)



These two pictures were made by Harvey Croze, of Detroit, before studying with Moholy-Nagy. They were widely hung in photographic salons.



These three pictures were made by Harvey Croze after studying at the Chicago Institute of Design under Moholy-Nagy. Do you like them any better?



TWENTY YEARS AGO when this was made, angle shooting was revolutionary. Like sardines in a can, the whole structure changes, in the above picture, if you remove any of its elements by placing a finger over it. Its compact composition is unique.

4. Slow seeing (time exposure)
5. Intensified seeing (photomicrography, infrared, etc.)
6. Penetrative seeing (X-ray, radiography, etc.)
7. Simultaneous seeing (double exposure, photomontage)
8. Distorted seeing (optical jokes, mechanical and chemical manipulation).

Since he is an Hungarian, his personal finances are always in an interesting state, but those of his school are attended to, partly, by such men as: Walter P. Paepcke, President of the Container Corporation of America; William A. Patterson, President, United Airlines; E. P. Brooks, Vice President, Sears Roebuck and Company; Charles M. Hines, President, Edward Hines Lumber Company; William S. Street, Vice President, Marshall Field & Company.

This array of practical business talent backs Moholy because his ideas for commercial design enhance American industry and comfort. His idea is simply that objects to be used should incorporate in their design only things that are equally useful and beautiful—which are the principals alike of good aeronautical design, good containers and good photographs.

Moholy teaches that to consider a picture aesthetically it is important to remove the human or realistic aspect. Symbols of realism have such a positive register on a person's opinion that we barely rise above this preconception to judge the picture on its aesthetic merits. Aesthetic values, to a great extent, are line, texture, form, disposition of emphasis.

It is hard to convince people that such values are infinitely important. The tendency is to think in terms of practical application, yet is it not a most wonderful thought to get pleasure from a photograph that does not rely on practical, realistic connections?

Innately, the city dweller loves a Sunday in the country, for the mere beauty of the wild flowers; the rocks and roots have an aesthetic attraction. They are attractive for no practical reason; they are



wonderful values in themselves. Certainly you never bother to explain to yourself why the poppy is so attractive. The painter, Pablo Picasso, said that to understand his paintings was like trying to understand the songs of the birds. He meant by this that his paintings were not dependent on ideas, that they were harmonies independent of such practical considerations.

Photography is considered as the realistic art. Yet there are certain aesthetic qualities peculiar to photography that no other medium can claim. Such qualities as the infinitely delicate gradation of the black to white scale, the optical distortion to produce emphasis, the ability to adopt new visual points as seen in the X-ray, the aerial photograph, the angle shot.

Moholy's work in photography has centered around the development of the aesthetic qualities of photography. He insists on clear and multiple gradation of gray tones in a photograph, from the blackest black to the whitest white.

To teach aesthetic photographic quality Moholy uses the photogram and the light modulator. The photogram usually is made from transparent or translucent objects. Such objects are chosen not for their significance as objects, but for their possibilities to produce the full gray scale from black to white. The photogram tells no story, plugs no idea, and bleaches out the literary side of photography. The photogram depends for its beauty on form and gradations.

The light modulator works on the principle that light is *the* variable in photography, that light as an element is responsible for the form in our photographs. To demonstrate this, crumble a piece of paper. It at once has become a new form. Valleys of darkness are evident where the light has not penetrated. Certain portions are brighter than others, because certain portions receive their illumination from transmitted light, and the softer portions from reflected light. And then there is the overlapping of light sources transmitted and reflected, partial and dual reflections. From the crumpled paper it is easily seen

that the form of the object depends on such matters of light. Moholy uses for his light modulator any object that changes light. Paper, tin, sheet metal are materials making good light modulators.

The photogram and the light modulator are Moholy's tools, his ground for what he calls making a "dictionary of photographic values." Put to use, they create original photographs that give one solution to the question of what is artistic in photography.

There are many sly comments that Moholy adds to his photographs, revealing his nature.

In a solarized nude, sitting on a rock Moholy has her wear a girlish pair of shoes to give the picture a warm, human, un-glamorous look. Such minor keynotes, so innocently inserted, can add a motif.

Another method Moholy uses to comment on life is the manner in which he throws into juxtaposition apparently dissimilar objects; yet their contact produces a strange interconnection. Two impish boys aside a knarled tree stump (page 69) could well be the graphic incarnation of William Blake's poem, which ends:

"Tiger, tiger in the bush

"Did the God that made the lamb
make thee?"

Purely photographic means are used to heighten this impression. The extreme high point from which the picture was taken is a mild departure from the way we are used to looking at boys. This fresh visual point creates new associations. It is then we see the relation of the boys and the stump. This is the reunion Moholy brought to American photography.

And, speaking of reunion, an article in *MINICAM* for October, titled "Gaspar-color" brought two old friends together again: Dr. Bela Gaspar, and Moholy-Nagy. Shortly, we hope to publish some colored photographs by Moholy on Gaspar-color paper. If so, they will be the first photographs made directly on color paper (by having a colored light play on a light modulator), and the first published photographic experimental work done by Moholy-Nagy in America.

on
his
anges
teri-

du-
for
of
they
one
istic

that
lling

rock
e of
man,
otes,
otif.
om-
he
dis-
ishes
ish
age
tion

d to
eme
was
we
fresh
It is
and
holy

e in
par-
ther
oly-
ome
par-
first
aper
ight
photo-
Mo-



KEEPING PROPERTIES OF SOLUTIONS

The accompanying tables give the approximate keeping properties and useful capacities of solutions made from Ansco and Urell formulas. In MINICAM PHOTOGRAPHY's Photo Data Clip Sheets for October, instructions were given on storing various photographic chemicals; in the November-December issue data was given on the keeping properties and useful capacities of Eastman Formulas.

The Ansco developing formulas have been divided into three groups: those of short storage life, those of average keeping qualities, and those of good keeping qualities. The values given are arbitrary because the actual time over which the developer can be stored while still yielding satisfactory results depends upon many variable factors, such as the surface area exposed to air in proportion to the total volume of solution. However, these figures can be used as an approximate guide to the relative keeping qualities of the formulas given.

The values given for useful life represent continuous use, without replenishment, soon after mixing. They are conservative, and under actual operating conditions the photographer may find that he can process considerably more film and paper than the stated amounts.

KEEPING PROPERTIES WITHOUT USE (URELL FORMULAS)					USEFUL LIFE 8 x 10-INCH SHEETS PER GALLON		
Formula	8 x 10 Tray	Gallon Tank	Stoppered Full	Bottle Half Full	8 x 10 Tray	Narrow and Deep Tank	Purpose
U-44	...	3 Mo.	2 Yr.	6 Mo.	...	75 ^{1/2} *	Neg.
U-86	2 Days	2 Mo.	6 Mo.	2 Mo.	25 (1:1) 20 (1:2) 15 (1:3)	...	Pr.
U-50	24 Hrs.	2 Mo.	6 Mo.	3 Mo.	20	44	Neg.
Fast Fix	1 Wk.	1 Mo.	6 Mo. (65 degrees)	6 Mo. (65 degrees)	62 (W.R.) 125 (S.B.)	62 (W.R.) 125 (S.B.)	Pr.
			4 Mo. (75 degrees)	4 Mo. (75 degrees)			

*Can be greatly increased by the use of the recommended replenishers.

¹Temperature up to 85°

²For negatives dilute 1:3; for prints 1:7

N.R.—Not recommended

S.S.—Stock Solution in separate bottles

W.R.—Water Rinses between developer and fixer

Neg.—Negatives

Pr.—Prints

L.S.—Lantern Slides

Dup.—Duplicates

Equivalents for use in determining the useful life of processing solutions in terms of roll films.

2 rolls No. 127 is approximately equal to 1 8 x 10-inch sheet of cut film

1 roll No. 135 is approximately equal to 1 8 x 10-inch sheet of cut film

1 roll No. 120 is approximately equal to 1 8 x 10-inch sheet of cut film

1 roll No. 116 is approximately equal to 1 1/2 8 x 10-inch sheets of cut film

1 roll No. 122 is approximately equal to 2 8 x 10-inch sheets of cut film

PHOTO DATA

CLIP SHEET FOR PERMANENT REFERENCE

MINICAM
PHOTOGRAPHY

KEEPING PROPERTIES OF SOLUTIONS

KEEPING PROPERTIES WITHOUT USE (ANSCO FORMULAS)					USEFUL LIFE 8 x 10-INCH SHEETS PER GALLON		
Formula	8 x 10 Tray	Gallon Tank	Full	Bottle	8 x 10 Tray	Narrow and Deep Tank	Purpose
Developer							
A-45	30 Min.	3 Hrs.	1 Mo. S.S.	1/2 Mo. S.S.	10	20	Neg.
A-79	4 Hrs.	N.R.	1 Mo.	N.R.	25	40	Neg.
A-70	4 Hrs.	N.R.	2 Mo.	1 Mo.	15	30	Neg.
A-103	12 Hrs.	2 Wks.	3 Mo.	1 Mo.	25	..	Pr.
A-125	12 Hrs.	2 Wks.	3 Mo.	1 Mo.	25	..	Pr.
A-130	12 Hrs.	2 Wks.	3 Mo.	1 Mo.	25	..	Pr.
A-135	12 Hrs.	2 Wks.	3 Mo.	1 Mo.	25	..	Pr.
A-20	24 Hrs.	1 Mo.	6 Mo.	2 Mo.	15	30	L.S.
A-30	24 Hrs.	1 Mo.	6 Mo.	2 Mo.	30	60	Dup.
A-90	24 Hrs.	1 Mo.	6 Mo.	2 Mo.	20	40	Neg.
A-47	24 Hrs.	1 Mo.	6 Mo.	2 Mo.	15*	30*	Neg.
A-48M	24 Hrs.	1 Mo.	6 Mo.	2 Mo.	15*	30*	Neg.
A-17	24 Hrs.	1 Mo.	6 Mo.	2 Mo.	10*	20*	Neg.
A-17M	24 Hrs.	1 Mo.	6 Mo.	2 Mo.	10*	20*	Neg.
Stop Bath				Stoppered Bottle			
A-210	3 Days	1 Mo.	Indef.	Indef.	75	75	
A-216	1 Day	1 Mo.	Indef.	Indef.	25	25	
Fixer							
A-201	1 Wk.	1 Mo.	3 Mo.	1 Wk.	{ 60W.R. 60 120A-210 120		
A-202	3 Days	1 Wk.	1 Wk.	1 Day	{ 50W.R. 50 100A-210 100		



★ LIGHT-CAMERA BRACKET

BY ANDREW M. LAVISH



TO facilitate the taking of visual training photographs of construction details involved in the making of fighter planes, the Photographic Department of Bell Aircraft devised a special bracket. This bracket, made of light-weight metal, holds both the camera and lights. As the camera is swung from scene to scene, the illumination conveniently follows.

The bracket is of simple design and can be duplicated by the average amateur photographer. It is equipped with a six-inch wooden handle to enable the photographer to hold the complete unit with one hand, and leave the other hand free to operate the shutter. The bracket is twenty-four inches long and in addition to providing a handy mount for the lights,

(Continued on page 76)

IT'S A
WEEGEE!
GRAFLEX-made



FOOT-loose, free-lance and in love with his camera, Arthur "Weegee" Fellig is this country's most spectacular, prolific and highest paid spot news photographer.

For the nation's newspapers and magazines Weegee captures the tragi-comic theatre of the sidewalks of New York. Forever on the prowl . . . his specialty is scooping the split-second emotional unmasking of people—with murder or fire setting the stage. Or, in reverse, a crippled pup rescued from a burning apartment house.

"Weegee the famous" is no idle boast but the mark of a man and a photographer who gets great pictures—all with a Speed GRAPHIC.



GRAFLEX gets great pictures!

VISIT GRAFLEX INFORMATION CENTERS for all GRAFLEX users, at 50 Rockefeller Plaza, New York 20, N. Y. and 3045 Wilshire Blvd., Los Angeles 5, Calif. When in New York be sure to see the GRAFLEX exhibit, "Photography at War," in the Museum of Science and Industry, Radio City.

Books for the Photo-Fan "GRAPHIC GRAFLEX PHOTOGRAPHY"

The Master Book of the Larger Camera

Filled with fine pictures and technical information. A library in itself. 440 pages, 28 Chapters, 650 Illustrations. 30 Distinguished Authors. Price \$4 at your GRAFLEX Dealer's.

"THE NAKED CITY"

by Weegee

A collection of over 250 of his most famous and fabulous pictures. With words—as only Weegee can write them! It will stir your photographic corpuscles. Available at booksellers and photographic supply houses.

BOLEX

aids for
Winter
Photography

RETOUCH-ALL KIT \$3.50



WONDROP \$1.00



The concentrated wetting agent for all photographic solutions dealing with fixing, washing, toning, intensifying, coloring, opaquing, spotting, and retouching. Use only one drop per 8 ounces of solution. 4 fluid ounces, or 2000 drops.

CINELAC \$1.00



Fingermarks, scratches, brittleness, etc. eliminated from prints and negatives. Cinelac protects black-and-white as well as color film. One 2-ounce bottle treats 5000 square inches of negative surface or nearly 1500 feet of 16mm film.

CORRECTOL \$1.25



Economizes on paper and negatives. Permits local retouching by brush; uncovers shadow detail. Prints and negatives become fresher, crisper, more professional with one application of Correctol. Eliminates streaks, spots and mottle.

AMERICAN BOLEX CO.

521 Fifth Ave. New York 17, N.Y.

GIVE BONDS TO THE ARMED FORCES
BUY WAR BONDS AND STAMPS

LIGHT-CAMERA BRACKET

(Continued from page 74)

it steadies the camera. A flange holds the camera securely and prevents it from slipping. Light sockets, three inches high, with swivel bases, are mounted at each end of the bracket to allow full adjustments of the lights. Reflector photoflood bulbs are used.

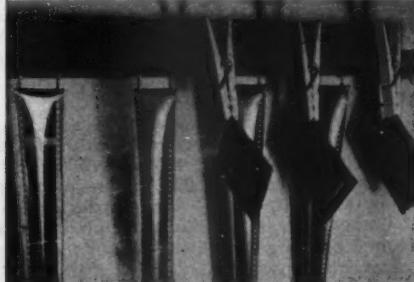
A toggle switch conveniently located near the camera turns the lights off and on. This is especially handy because many photographs are taken "on location," and it is desired to interfere as little as possible with the employees. The lights thus can be quickly turned off after each exposure.

Use of the bracket has permitted the substitution of a 35mm. camera for a larger one. The saving in film and time is worth while when it is considered that 25,000 pictures have been taken by this method during the last eighteen months at the Bell Aircraft plant.

Multiple Film Hanger

A DRYING HANGER, for both cut film and 35mm rolls can be made from a length of wood and materials available at dime stores. The materials needed are: length of wood (size to suit maker), 2 corner braces with screws or nails, rounded screw hooks, and brads.

Hammer the brads along one surface of the wood, spacing them to allow clearance for roll film and a sheet of cut film, if it is desired to



dry both types at once. Otherwise space them to allow clearance only for the cut sheets, to be hung with spring clothespins or wooden negative clips.

On the other side, attach the screw hooks, allowing two for each roll of 35mm film to be suspended. Clips can be used at the bottom to keep roll film from curling. This completes the dryer and it is ready for attaching to a wall.—Herman Klein.

Confidence

✓ IN OUR FACILITIES
✓ IN OUR ORGANIZATION
✓ IN OUR INTEGRITY



Immediately upon the advent of Pearl Harbor we discontinued all civilian activities and placed the entire Curtis Laboratories staff and facilities at the disposal of the Armed Forces. During these years of production pressures and material shortages — of long working hours and never-ending research — high-ranking Procurement Officers from all branches of the Service have learned to respect and have confidence in our ability to "deliver the goods" . . . as specified, and *on time!* Quietly and without publicity we have executed critical aviation optical assignments of incredible precision — assignments still secret for reasons of military security.

And you may well look forward with equal confidence to our plans for tomorrow, when we shall again be allowed to apply to the advancement of peaceful pursuits, the many devices and processes perfected in the urgency of war.

Curtis
LABORATORIES, Inc.
2719 HYPERION AVENUE
LOS ANGELES 27, CALIFORNIA

CLASSIFIED WANT ADS

MINICAM PHOTOGRAPHY has 64,242 paid A. B. C. monthly circulation; including all manufacturers, jobbers and dealers in the photographic industry; as well as well-known photographers, instructors and masseuses. Photography, photo squads of the Armed Services, advanced amateurs, beginners, and the Technical Library of EVERY Army Air Base in America. These 64,242 readers are an influential market. Want-Ads: 10 cents per word, each insertion, minimum 15 words, payable in advance. All ads restricted to agate type. Forms close December 15 for February issue.

WANTED TO BUY

WILL BUY any movie or still camera regardless of size or condition. Top price paid. W. K. Crosson, 4515 Grand River, Detroit 8, Mich.

CASH FOR ROLLEIFLEXES, Super Ikonta B's. Give condition, price. YANK, The Army Weekly, 205 E. 42nd Street, New York.

SEND us your camera today. Will send certified check by air mail immediately. Items held ten days for your approval or our price. Free estimates for photo equipment. "Cleveland's camera superstore." Rothbart and Reinman, 1920 East 9th St., Cleveland, Ohio.

LEICA 11B or similar. Thermar 20C Telyt, 24x34 enlarger. Sell Valoy \$35 or trade for Leica accessories. G. K., 33-28 157th St., Flushing, New York.

WANTED Photo Finishing Plant equipment. Give description and price. James Dixon, 704 Dryden Drive, Baltimore 29, Md.

GLOSSY. Close-up Prints of fancy racing pigeons, lofts, etc. \$1 up according to quality. A. C. Naether, 442 Woodman, Van Nuys, Calif.

WANTED -24x34 Graflex film holders and also film pack adaptors. Marlowe, 1078 E. Cooper Dr., Lexington, Ky.

FOR SALE

4x5 B&J, 4.5 lens, rangefinder, flash gun and tank, \$159. Gaglione, 167 Seeley St., Brooklyn, N. Y.

ENLARGER: Simmons Omega B, 2", 3.5 lens, 35mm, negative carrier, perfect condition, \$75. Mrs. Edward Wallace, 226 South Center, Goldsboro, North Carolina.

WESTON MASTER, 9x12 Cameras. F 4.5 lens, Recomar, Avus, Ideal, Maximar; complete, trades only. 1A Graflex, 4x5, \$100. 34x46, 3A, 35mm with adaptors for 110 film, \$20 to \$45. We adapt your cameras to take any size of stired. Cameras wanted. Levey, 735 Noble Ave., Bronx 61, N. Y.

ASSEMBLE your own coupled rangefinder and flash synchronizer. Instructions and all parts, machined ready to put together with a screwdriver. Coupling new under (give negative size and focal length). \$15. Pocket rangefinder, \$2.10. Flash synchronizer, for Comptur type. \$1. Ran-Vu, East Lansing, Mich.

BEAUTIFUL ORIGINAL Kodachrome California roses, 3 for \$1.00. Ed Drews, 3807 Wisconsin Street, Los Angeles, California.

ENLARGERS—Build your own. Kit of parts, \$6.00. Free particulars. Crescent Engineering, Box 251, South Pasadena, California.

FILM for Bolex 8-100 ft spools Kin-O-Matic Gold Star No. 1, \$1.00. Kodachrome A 100 ft spools, \$6.00. 1986 date on both. 60 doz. Agfa Planchrom, 4x5 cut film, April 44 dating 70c box 22 doz. P. P. Extra. Velostigmat f4.5-6in. barrel, no flange \$25.00; Exenar 3.5 6/4 in. Compound (old) \$40. Kent Easter Studio, P.O. Box 3831, Balt. 14, Md.

WELLS-SMITH will buy, sell or trade. Read our advertisement. Chicago 33, Ill.

24x34 Curtis Color Scout, 7 1/2" f/2.8, 100 ft. \$100. Kairi Rangefinder, complete accessories, good condition, case. Sale, trade, best offer. Sgt. Rollans, Finance Office, EAAF, Enid, Oklahoma.

NEW 31/4" Wollensak wide angle for 4x5 camera, Alphax shutter \$36.50; 35-mm. bulk film 25ft. \$1.50, 100ft. \$5.00 all types; 4x5 Graflex Film Pack adapter \$5.75; 4x5 Graflex ground glass back \$5.50; 34x46 Graflex film holder \$5.75; 6-4x6 Voigtlander, 3-4x6 Ica film holders \$1.00 each; 12" Schneider Tele-Xenar f5.5 tripod, thread in focusing mount fitted for Exakta, Primoflex Leica or Contax \$219.50; 2 1/4x3 1/2 Anasco Automatic film wind camera, Anastigmat 37.5 lens, Rim set shutter \$1.00 each; 34x36 \$3.50; 9x12 Zeiss Maximar Rodenstock f4.5 Vario shutter case, fine, \$58.50; 34x4 1/2 Premo film pack camera lens and shutter, excellent, \$27.50; 24x34 Ikonas Tropical, Rapid, Alplamat lenses, 1 to 300 second FPA case, \$37.50; 50° Tessar lens, f3.5, \$25.00; 6" Anasco Anastigmat 16.3 Optimo, shutter 1 to 300 second \$36.50. **CAMERA MART, Dept. M., 70 West 45 St., New York City.**

IKONIA B: Tessar f3.5, 1 to 1/300th sec., case, \$85. Sgt. Wollensak, 705 Band Seymour, Ind.

PLAUREL MAKINA, II's, three lenses, extras, \$500; Bentzen Primaflex, f2.8, \$175; 2 1/4x3 1/4 Dallmeyer with 12.9 Dallmeyer Press lens complete, \$90; 30x70 Zeiss lens, f3.5, \$10; 34x46 Ensinger Reflex no lens, \$25.00; good 3A folding Kodaks with good anastigmat lenses, \$20 and \$25; Gunstock for Zeiss, Contax \$150; Panflex for close Contax, used, \$150; Harness for Contax, \$25; Stereo Zeiss Cupido f4.5 Tessar View 12, \$25; Goers Achromat f3.5, \$25.00; Goers Dagor lenses takes full 4x6" and Stereos, \$200; Rolleidoscopes, and Headoscopes; 5x7 Homeopartrait Graflex with 11" f5.6 Cooke lens \$300; 5x7 Zeiss Universal Juwel with 8/4 Dagor, 7 1/2 Tessar, Zeiss Triple Convertible Protar or without lens; Lenses, Projectors, 35mm. Projectors, 16mm. Close out \$12.50; F&R Vaporators, \$5.95; F&R 16mm. Editor Viewers, \$10.95 list, special, \$5.95; New Model E Kalart Range Finders, \$25; Kalart Micromatic Flash Guns, \$12. Will buy, sell or trade. No lists. State your needs fully. Write to us, same day camera received. **WELLS-SMITH**, 75 Adams Street, Chicago 3, Illinois.

BOOKS—EDUCATIONAL

CORRESPONDENCE COURSES and self-instruction books, slightly used. Sold. Rented. Exchanged. All subjects. Satisfaction guaranteed. Cash paid for unused courses. Complete information and 92-page catalog. Address bargain catalog Photo Write—Nelson Company, Dept. 2-55, Chicago 4.

BACK-DATED magazines, Foreign, domestic, arts. Catalog 10c (refunded). Cicero's, 863 First Ave., New York 17, N. Y.

OIL COLORING photographs a fascinating hobby or profitable business. Learn at home. Easy simplified method. Send for free information. National Photo Coloring School, 1315 Michigan, Dept. C, 2122, Chicago 5.

INSTRUCTIONS

MAKE MONEY IN PHOTOGRAPHY. Learn quickly at home. Easy plan. Booklet free. American School of Photography, 1315 Michigan, Dept. 2128, Chicago 5.

CAMERAS, PHOTO SUPPLIES

WAR-BARGAIN Used Cameras—35-mm. \$6.00. Graflex \$29.50; 6 1/2x8 1/2 View 31-50. Movie Camera \$5.00. Projector \$7.50. new Busch and Lamp lenses \$4.98. Hundreds of others—complete list, descriptions 25 cents. Used Camera Directory, (List 3R), 3111 West Tuscarawas, Canton 3, Ohio.

MOVIES—SLIDES—PHOTOS

HOME MOVIES you'll want—8-16-mm. Sample and lists, 10c. Also, supply of 8mm. camera film. Special—P-8 Univex Proli. bulbs, 3 for \$1.00. Get yours now. **MARSHALL**, 413-M, Elmira, N. Y.

OUTSTANDING 8mm.-16mm. films. Sound 16mm. films. Lists 3c. John Dempsey, 1613 Stewart, Youngstown, Ohio.

8MM.-16MM. home movies exchanged, sold. Free particulars. Multi-prices, 171 Euclid, Bridgeport 4, Conn.

SOUND films for sale and rent. Send for catalogues. Jenkins, 16MM. Audifilms, Lewisburg, Pennsylvania.

BETTERPIX, Outdoor Safety Film, 100 ft. 16mm., \$2.50. 25 ft. Double 8mm., \$1.25. Free Developing. Finished subjects sold, exchanged. Sound library. **BETTER FILMS**, 742 New Lois, Brooklyn 7, N. Y.

EXCHANGE Kodachrome slides that you have taken for other Kodachrome slides not in your collection. Send twenty-five cent color or stamps. For our plan, latest catalog and Membership card in the Pan-American Color Slide Exchange, 212 Pacific Ave., Houston 6, Texas.

PIN-UPS, 180 glorious girl subjects! Samples 25c—Huge Bargain Pack \$1.00. Clover Novelty, Dept. M-32, Hollis 7, New York.

BEAUTY BREVITIES, 8mm. \$2.00; 16mm. \$4.00, prepaid. Complete glamour, thrill lists, glamour sample, 10c. Jenkins, 392-D, Elmira, N. Y.

BEAUTIFUL Kodachrome Slide and Art Slide Co., R-1, Canton, Ohio.

MOVIE-THRILLERS, "Tom Mix," "Lone Ranger," "The World," 16mm., \$8.00; 2000, 100 ft., \$4.00. Also, "Francis Lee," featuring, "Reckless Rosie," 180 ft., 8mm. \$3.75; 380 ft., 16mm. \$8.75. Also, Glamour Lists and Sample, Dime. **ZIENTEK FILMS**, 1129 Monroe Circle, Baltimore 25, Maryland.

BEAUTIFUL Kodachrome Glamour Slides, \$2-\$8. Art Transparency Co., Box 2084-P, San Antonio 6, Texas.

FREE. Projector Film Catalog; samples. Goodwill Company, Jackson, Tennessee.

GEORGES GIRLS, New Glamorous "Allure" and "Whistle Girls," 8mm. 50 ft. \$2.00; 16mm. 100 ft. \$4.00 each. Comedy, Travel, Adventure subjects. Equipment accessories. New 1945 Film List—3¢ stamp. Audet, Box 6520-EG, Plaza 392 Elmira, N. Y.

21 EXCLUSIVE Pretty Girl Movies! Many in color! Latest releases, "Allure," "Beauty Brevities," "Starlet Releve," "Cinderella," 8mm. \$2.00 each; 16mm. \$4.00. In color 8mm. \$7.50; 16mm. \$14.75. Also, Microscope Kits, \$5.00. Complete lists, sample, dime. Jenkins, 392 Elmira, N. Y.

REVERSAL or Negative Motion Picture Processing, 16mm., 16mm., 75c; 50 ft. 16mm., 50 ft. 25 ft. Double 8mm., 35c; 25 ft. Single 8mm., 25c. Write for our free bulk and subject film price lists. Ritter Film Service, 628 Lyman Avenue, Oak Park, Ill.

FILMS

8-16MM., ART COLOR FILMS. Sample and list, 10c. Duatone Films, 809 Chestnut, Erie, Pa.

CAMERA FILM: 100 ft. Panchromatic 16mm., Weston 64, \$4.85; 8mm., Double 88, Weston 24, \$1.89; free processing. Movie accessories, chemicals. We do processing. Free circulars. **Fro-mader Genera**, Davenport, Iowa.

OUTDOOR CAMERA FILM—We still have it. 16mm., 100 ft. \$2.50; 8mm., double, 25 feet \$1.25; includes processing. Immediate delivery. **Brian Studio** (376), 306 West 44th St., New York City 18.

35MM., NEGATIVE Eastman X Agfa Supreme; 25 feet, \$1.35; 50 feet, \$2.35; 100 feet, \$4.15, postpaid. Eastman 22 years. **KNIGHT'S FILM SERVICE**, 1441 Ridgeview, Los Angeles 26, Calif.

RELOAD your own Cartridges, 35mm. Gunnar, 25 feet \$1.50. Eastman, Ansco—25 ft. \$1.50. 100 ft. \$4.50. Dealers write for Special Prices. **MINIATURE FILM SUPPLY CO.** of Hollywood, 2406 Canyon Dr., Hollywood 28, Calif.

PICTURES AND POSTCARDS

GLAMOROUS PIN-UPS! Real photographs of Hollywood beauties! 10-31. Fine Arts, Box 2084-P, San Antonio 6, Texas.

64 ART PHOTO POSTCARDS of Gorgeous Beauties, \$1.00. Reed Novelty, Dept. B-3, Box 24, Queens Village, N. Y.

DEVELOPING—PRINTING—REPAIRING

35MM. ONLY—Developing and enlarging, 36 exposures \$1.25. 18 exposures .75 (3 1/4 x 5 size). A 5x7 enlargement of best picture FREE. All exposures printed. Cash with order. J. H. GLENN, 315 Quarles, Frankfort, Ky.

35MM. FANS—See our display advertisement on page 108 Minipix Laboratories.

FREE! Send negative, this ad for beautiful 4x6 enlargement (stamp appreciated). 16 Sparkling prints, 2 Hollywood enlargements from roll or negatives 25c. Lifetone Studios, Dept. 165, Des Moines, Iowa.

BEAUTIFUL hand-colored enlargements from your negatives 5x7, \$1.35; 8x10, \$2.10; 11x14, \$3.00. 50c more for coloring each extra person on photos. From photos 50c extra. Specify coloring wanted. Now! Elegant, genuine leather frames for above: 5x7, \$4.50; 8x10, \$5.50; also leatherette, \$1.75 and \$1.95, respectively. SPECIAL, 2 1/2 x 3 1/2 negatives and 4x6 black-and-white enlargements from 35mm. Kodachrome transparencies—8 for \$2.00. Remit in full plus 25c for mailing on all above orders. No way sent COD. Specialists in miniature finegrain photo-finishing. Columbus Photo Supply, 1949 Broadway, New York 23, N. Y.

TROUP'S PHOTO SERVICE, Troup Building, Toccoa, Georgia, 6 or 8 exposure roll film developed and printed 25c. 35mm. developed and enlarged—36 exposure \$1.00.

VETERANS, Discriminating Amateurs: Custom enlarging for your choice negative. Indicate cropping, paper, toning, etched finish desired. 8x10, \$1.50; 11x14, \$2.50; hand colored \$1.00 extra; gift or 16x20 salon exhibition mount \$1.00 additional. Forbe Studio, 4305 Marlborough, Shorewood, Wisconsin.

8x10 ENLARGEMENTS, doubleweight, 3 for \$1.00. Send mount with negative to Mrs. W. H. Dykens, See A. Scott Field, III.

ENLARGEMENTS—Eight 5x7 from negative \$1.00; Six 5x7 from photo \$1.00. Robert Renshaw, Jr., P. O. Box 478, Chester, Pa.

BEAUTIFUL hand-colored enlargements, 5x7, \$1.00; 8x10, \$1.35. Send negative and state coloring wanted. Remit in full. None C. O. D. Work returned postpaid. Fairchild Photo Service, 812 Elm Street, Watsontown, Pa.

MUSIC

PIANISTS—Quickly improve technique, sightreading, accuracy, memorizing, playing through Mental-Muscular Coordination. Free Booklet. BROADWELL STUDIOS, Dept. 175A, Covina, Calif.

MISCELLANEOUS

UNUSUAL KODACHROME ART SLIDES! List, 2 samples \$1; 5-32. Art Transparency Co., Box 2084-P, San Antonio 6, Texas.

PRINT PHOTOS on V-Mail, cloth, stationery, greeting cards, etc. From negatives. No Darkroom or fuss. Special liquid and instructions 50c. Gould, 1042 Union, Brooklyn 25, N. Y.

MINERALS, Coins, Stamps, Indian Relics, Pistols, Old Glass. Catalogue 5c. Cowboy Lemley, Las Cruces, New Mexico.

BOOK MATCHES—With name and address or initials. 50 for \$1.00. Samples. Piedmont Press, 747 S. Plymouth, Rochester 8, N. Y.

TRICK CHALK STUNTS Catalog 10c. Baldy Chalk Talks, Oshkosh, Wisconsin.

SAVE up to 25% on paper and chemicals. Write for free list of money saving values. Albany Camera Shop, Inc., 204 Washington Ave., Albany, N. Y.

REPRODUCE any snapshot on handkerchiefs, slips, leather, stationery, etc. Outfit \$1.00. No stamps or checks. Dissell Co., 4667 Rockwood Road, Cleveland 5, Ohio.

THE PINKY KNIFE for clean, smooth, effortless negative etching—Hand made by an experienced retoucher. A trial will convince you. Pinky, 5635 Catherine St. Philadelphia 43, Pa.

SOLVE your Christmas gift problems with selections from our catalog of suggestions for all type collectors. All lists 10c. Sistershop, Northbranch, Kansas.

SONG POEMS wanted to be set to music. Send poem for immediate consideration. FIVE STAR MUSIC MASTERS, Beacon Bldg., Boston 8, Mass.

FILM IS SCARCE—How would you like to OWN and work with ORIGINAL or 2 1/4 x 3 1/4 Professional Cut Film Negatives of HOLLYWOOD'S FAMOUS COVER GIRLS in full figure artistic poses. Specify high or low key and negative size. \$2.00 each or 3 for \$5.00 in 4x5 size, \$1.50 each or 4 for \$5.00 in 2 1/4 x 3 1/4. NO COPIES. Originals Guaranteed. P. O. Box 2099 Hollywood 28, Calif.

PHOTO STAMPS—From Any Snapshot or Negative. Gummmed and perforated. 100 stamps for \$2.00. Personalize your stationery! No Stamps Please. Melanson, Box 206, Church Street Annex, New York 5, New York.

PROFITABLE OCCUPATIONS

PHOTOGRAPHY without Camera. Photo Stamps, Instructions \$1.00. Alvin, 553 William, Winnipeg, Manitoba.

THE WAR COMES FIRST!

All Research Facilities of
TECHNIFINISH LABORATORY
Now Devoted to War Effort

We're using every bit of skill and laboratory equipment we possess in the production of an important aerial gunnery training aid.

Despite this fact, we are still giving the same fine 35 mm. service at low cost. Since many thousands of service men and their families send us films each month, we feel it our duty to carry on this part of our work.

Meanwhile, many important photo finishing developments must wait. When Victory is won, we'll again start increasing our lead as America's finest low cost 35 mm. photo finishers.



TECHNIFINISH

THE GREATEST NAME IN PHOTO FINISHING

35MM POSITIVE TRANSPARENCIES

1 strip 36 exposures 35c
3 rolls \$1.00; 6 rolls \$1.75
We will print 35mm positives from your 35mm negatives for projection from 2" x 2" slides or from the full strip. Returned intact. Fine grain developing of 35mm negatives 25c. Re-labelling of 35mm slides 10c. Color prints 25c each. Color negative or positive. Catalogue of Stock Slides and Kodachromes on request. 36 35mm Cardboard Slide Mounts, 50c. Special on Gem Jr. Slide File \$1.00 FREE MAILERS.

POSITIVE PRINT CO. 117 W. Wood Ave., Linden, N. J.



GET OUR PRICE before you SELL!
If you have any desirable camera or
camera equipment, mail or phone de-
scription. Our best cash offer at once.
FOR 34 YEARS, THE PLACE TO BUY - SELL - EXCHANGE

ABE COHEN'S EXCHANGE, INC.

"THE HOUSE OF PHOTOGRAPHIC VALUES"

142 FULTON STREET, NEW YORK, N.Y.

Frosty Frappé'

*Winter's murky shadows capped
by frozen sunlight . . . clouds of
sparkling snow, faintly decorated
with rippling tracery . . .*



... This is one of the most beautiful, but most difficult, subjects to capture in a photograph. Such scenes often change too fast to permit retakes . . . the weather's too cold to encourage several trial shots. But with the Master, they are simplicity itself. *A single exposure is enough!* For the Master's

highly selective viewing angle, its exclusive exposure dial, and the precise measurement assured by the WESTON name . . . give you the *exact* exposure you want the *first* and *every* time. Weston Electrical Instrument Corporation, 606 Frelinghuysen Avenue, Newark 5, New Jersey.

WORTH
WAITING
FOR . . .



Weston *Exposure Meters*



**For negatives of rich detail
—a B & J 4x5 PRESS CAMERA
For "Prize Winning" Prints
—A SOLAR ENLARGER**



The pictures you take today can be cherished possessions tomorrow. That is why every snap of the shutter should be the beginning of a "Prize Winning" picture. With a B & J 4x5 Press Camera you capture on the film all the rich detail of your subject. And with a Solar Enlarger you transform that film into a print of "Prize Winning" pictorial quality.

*Catalog Free. Lists many B & J items
now available from your dealer.*

MANUFACTURERS

BURKE & JAMES

321 S. WABASH CHICAGO 4, ILL.



MORE FOR YOUR MONEY!

Have Your 35mm Film
ultra fine grain
DEVELOPED and
VAPORATE Treated

ONLY
25c
per roll

Developing, Vap-O-Rate, and
3 1/4" x 4 1/2" Glossy Enlargements:

36 Exp. Roll, \$1.00 — 18 Exp. Roll, 75c
8 Exp. Roll, fine grain 25c 12 Exp.
developed and printed 25c Roll 40c
Complete Finishing Service

De Luxe Enlargements, Transparencies, etc.
FREE Mailing Bag and Price List

Please Remit With Order to Save C.O.D. Charges
949 BROADWAY
NEW YORK, N. Y.

DEVELOPIX

35 MM BULK FILM GUARANTEED FRESH FILM

27 1/2 Feet—\$1.25; 100 Feet—\$4.00. Plus XX—Dupont
No. 2—Supreme—27 1/2 Feet—\$1.50; 100 Feet—\$5.00.
SUPER XX—DUPONT No. 3—Panatomic X.

ALLEN'S CAMERA SHOP
7424 Sunset Blvd., Hollywood 46, Calif.

PIN-UPS OF AMERICA'S BEAUTIES MAKE YOUR OWN PICTURES

Also Transparencies for Projection and Movies

NEGATIVES 35 MM.....	10 For \$1.00 35 For \$4.00
TRANSPARENCIES 35 MM UNMOUNTED.....	15 For \$1.00 55 For \$3.00
35 MM. MOVIE-STRIP (55 TRANSPARENCIES).....	34.00
NATURAL COLOR 2" x 2" SLIDES MOUNTED.....	2 For \$1.00 9 For \$4.00
PHOTO-PRINTS 5" x 7".....	3 For \$1.00 10 For \$3.00

VENUS SERVICE (2)
140 West 43rd Street, New York 18, N. Y.

16 MM Sound Service On Priority NEW

Bell & Howell Filmosound..... \$437.63
Victor Model 40 B..... 425.00
Postwar Orders Accepted. \$10.00 Advance Deposit
Repairs—Accessories—Film Rental Service

ANCHOR SUPPLY SERVICE
Box 482, Ithaca, N. Y.

AT LAST PRINT FRAMES

4 x 5.....	\$1.10	2 1/4 x 3 1/4 SIZE.....	\$0.85
8 x 10.....	\$2.45	3 1/4 x 4 1/4 SIZE.....	\$0.95
5 x 7.....	\$1.50		

WELL CONSTRUCTED OF WOOD AND METAL. COMPLETE WITH GLASS. IMMEDIATE DELIVERY, ACT NOW. Sent post-paid if cash with order. C. O. D.'s accepted.

S & M SALES CO.
1528 1/2 CAHUENGA BLVD., HOLLYWOOD 28, CAL.

Learn Photography at HOME

Splendid opportunity. Prepare quickly in spare time. Easy method. No previous experience necessary. Common school education sufficient. Many earn extra money. Write for booklet "Opportunities in Modern Photography," particulars and requirements.

AMERICAN SCHOOL OF PHOTOGRAPHY
1318 Michigan Avenue Dept. 1941 Chicago 8, Illinois

First Click at Fifty

Sir:

I want to tell you that I enjoy MINICAM, and have been enjoying it for several years, often referring back to articles that help me to get better results.

My son and I outfitted a dark room seven years ago, and I never expected to use it until he married and went away, when he taught me how to use it, from which beginning I've tried to go on learning. Have you very many subscribers who started after the age of fifty? I wondered . . .

This son is now in the Marine Corps Reserve, and I try to send him pictures of his wife and little daughter from time to time.

I have a Kodak Bantam Special, F2, and also Kodak 616—now my son wishes me to use his Speed Graphic. I have not yet tried it, but hope to soon.

It is hard to say what articles that you published, have been most interesting, but I might mention "Light Makes the Picture" in the March number, and "Children Are Serious People" in the April issue. Your May number is everything you promised.

I like to photograph children and animals; and have succeeded, I think, in getting some very natural shots. Thank you for your very fine magazine.

ADELAIDE ELDEN,
304 E. Sixth St.,
Clare, Michigan.

BOLEX H-8, F2.5, 1" F3.5, 1 1/2" F3, Comp. Case, Revere Projector and Case, Dark Room Screen..... \$430.00
BOLEX L-8, F2.8 Kerm Foc. Case..... \$148.00
GRAFLEX B, 6" Tessar F4.5, R. H. Acc..... \$116.00
GRAFLEX B, F4.5 Kodak Anas. \$75.00
G. E. Interval Timer, \$6.00; TEXAS Leica, Contax, etc.

OTHERS — TRADES

Available on AAS or better—immediate delivery.
Kodak Medalist and E. R. Case..... \$195.00
BANTAM Special, \$125.00, VICTOR 40B Sound Prol, \$382.50, 4x5 ANN. SP. GRAPHIC, F4.7 Elktar, Kalar R. F., Abbey Gun, \$189.00—Other Lenses and Acc. Available. Anpro Y. S. A. Sound \$339.50, Other Items, Trades.

NEW CATALOG AVAILABLE

THE CAMERA PLACE, Inc.
101 West 51st St. (at Radio City).
New York 19, N. Y.

ENLARGEMENTS

of supreme quality.
FINE GRAIN

processing for discriminating photographers.

Specialists for 35MM films.

Write for free mailer and price list to
Spiratone Fine Grain Labs., Dept. M
49 West 27 St., New York 1, N. Y. Tel. MU 4-1329

IMPROVE YOUR PLAYING



PIANISTS—Send for FREE Booklet showing how you may greatly improve your technique, speed, and musicality by learning to play and playing thru Mental-Muscular Coordination. Quick results. Practice effort minimized. No expense. No obligation. No obligation.

BROADWELL STUDIOS
Dept. 235-A, COVINA, CALIF.

ICAM,
years,
me

seven
until
aught
g I've
many
fifty?

as Re-
of his
ne.

2, and
me to
ried it,

a pub-
might

Series

imals;
some
very

N,
t,
n.

4490.00
\$46.00
\$116.00
\$75.00
x. etc.

ry.
\$105.00
1 ProL
Kalar
1 Acc.
Items,

1-1329

YING
klet showing
y tech-
ightseeing
ular Coordin-
effort mini-
mization.
UDIOS
INA, CALIF.

CAMERA CLUB

NEWS AND IDEAS

HOW DO YOU STAND

Are you satisfied with your use of photography as an art?

Is your work individualistic, or could it be that of any one of many pictorialists?

Has it changed in character, compared with five or ten years ago?

Twenty-five years from now will it reflect your world as of today?

Is your selection of subjects to be photographed prompted by your interest in everyday life, its people, its significance; or is it prompted by pictures you have seen in magazines and salons?

Are your efforts aimed toward advancement of photography as an art or is such an aim sacrificed through fear of lowering your score in the international salon "batting average"?

Do you think salon photography has shown any change in character and trend during the past five or ten years?

YOUR ANSWER

If your answer to a majority of the foregoing questions is "No" the PICTORIAL PHOTOGRAPHERS OF AMERICA invite you to consider their winter program which has been planned to stimulate serious thought about what we are doing with photography and to create thought and experimentation in the use of photography as an art.

The meetings held on the first Tuesday of each month will be devoted to the discussion of this vital and timely subject, while the mid-month meetings, which are held on the third Tuesday of each month, will be a progressive course of instruction for those who are learning to make pictorial photographs, as well as old-timers who want to brush up and freshen up.

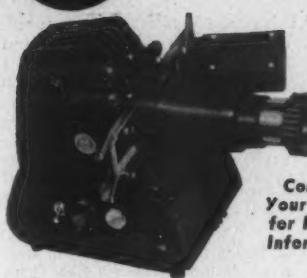
Here are some of the speakers members and guests will hear as this program unfolds: Willard Morgan, Dr. D. J. Ruzicka, Ira W. Martin, Paul Strand, Halleck Finley, Ansel Adams, Rowena Brownell, Mildred Brousseau, Walter E. Owen and Irene M. Heffner.

You are cordially invited to come to the first meeting you are able to attend, and should you wish to come to others, or desire to support the work of the PPA, your application for resident or non-resident membership will be carefully considered. For further information, write the Sec.-Treas., Samuel Grierson, 1155 Dean Street, Brooklyn, N. Y.

The Print Competition between member clubs of the NEW ENGLAND COUNCIL OF CAMERA CLUBS promises to be rugged, as indicated at the first judging in early November. Don White, of the SPRINGFIELD PHOTOGRAPHIC SOCIETY is in charge of the competition; Paul Dixon has lined up a number of new travel shows; the new editor of the Council Bulletin is Newell Green, of Hartford.

NU-MANUMATIC

Slide Projector



Contact
Your Dealer
for Priority
Information

Slides look better and last longer . . . when projected with the NU-MANUMATIC. Heat Filter protects your slides . . . Forced-Air Cooling dissipates radiated heat. Has precision optical lens (5" f:3.5). The Manumatic Slide Carrier automatically stacks 50 paper or 20 glass slides. Uses up to 300 watt lamp. Compact—conveniently portable.

GoldE Manufacturing Co.

Dept. P, 1222 W. Madison St., Chicago 7, Illinois

24 ISSUES — \$4.00

Attach your check and mail to Minicam
Photography, 22 East 12th St., Cincinnati, O.

Name

Address

City State



Ask your dealer to show you a

FOTOFOLIO

THE ONLY WAY TO MOUNT
PHOTOGRAPHS PROPERLY!

AREL PHOTO SUPPLY • ST. LOUIS, MO.

And yes, the new officers are: John Vondell, President; D. S. Lacroix, Secretary-Treasurer; and five Vice-Presidents, K. R. Phinney, H. W. Wagner, Ray Lavender, Cecil Atwater and Newell Green.

Reports drifting in from the west coast: Mesdames K. V. Arntzen, Fred Herrington, and Jack Wright are now called "Jedge" by their intimates. Seems they did an uproarious job of dissecting (judging) prints last month at the CALIFORNIA CAMERA CLUB in San Francisco. The members asked for it, and the selection of pictures by this all-woman jury was equal to that of any judges the club has had this year. Camera clubs who are looking for judges take note!

PHOTO LEAGUE has established new headquarters in a penthouse at 30 East 29th St., New York City. They've had their share of excitement at the old location. During a fire, Al Taylor was forced to exit through the front window via a fireman's ladder. More recently members witnessed a shooting duel ("cops and robbers") which took place in the street outside. Fires and gun skirmishes are not included in their new lease—but there are 10,000 females in the building.

Tip from the ST. LOUIS CAMERA CLUB COUNCIL *Chatter*: A very handy easel for paper that has boundless elasticity under the enlarger is double-coated scotch tape. Long used in many a darkroom, it seems to be a trade secret. It sticks well to a wooden or composition surface, and the enlarging paper peels off with ease.

With the full endorsement and blessings of the PSA Color Division, the PHOTOCRÖME CLUB of San Francisco is sponsoring an International Color Slide Salon, the first of its

kind to be held west of Chicago. The jury will consist of Fred Bond, Mike Roberts and Nicholas Haz. Entries close on January 25th, entry forms obtainable from Dr. Max Wassman, Jr., 1012 Market St., San Francisco 2, California.

Greetings to PHOTO ALPINE, Seattle's newest camera club. As might be suspected, mountain photography is the prime interest of the club, although all phases will be considered including documentary, pictorial, record, color slides, movies, nature and wild life. Any one who has made, or intends to make mountain photography his or her main interest, is eligible for membership. Plans are being made for consideration of those who live too distant to attend meetings so that they may submit work for the monthly competition. Anyone interested may obtain further information from G. L. Kinkade, 103 L Street, Auburn S.E., Washington.

MONTREAL CAMERA CLUB announces that the 1945 Montreal Salon of Photography will be held during May. The Executive Committee of this progressive club across the border consists of: C. Selby Rickards, President; G. Lorne Wiggs, Vice-President; Paul Gerin-Lajoie, Secretary (60 St. James St. W., Montreal); George Hays, Treasurer. Other members: A. H. Capper, Raymond Caron, B. J. Columbia, Phil Croft, and Percy Varley.

CAMERA CLUB CONTEST

Dassonville Co. Ltd., makers of CHARCOAL BLACK texture papers, firmly believes in the potentialities of the Camera Club as a unit, and in the potentialities of its members as individuals. Beginning December 1st and continuing through May 15th they are sponsoring the first annual DASSONVILLE CAMERA CLUB COMPETITION. Club members may participate as individuals, combined efforts may be credited to your own club. A trophy will be awarded May 19th to the winning Camera Club. Individual awards will be made during the first week of the months of February, March, April and May. The judges will select the best twenty-five prints submitted each month. Prizes of one-half gross, or six assorted dozen 16x20 CHARCOAL BLACK paper, or one dozen sheets 40x48 CHARCOAL BLACK photomural paper will be awarded the makers of the prints selected. Winners may choose which prize they desire and select their own surface or surfaces. The photomural paper is not for sale and may be procured only as a prize. Each entry should have the official label and entry form. These and further information may be obtained by writing Dassonville Co. Ltd., 205 East 42nd Street, New York 17, N. Y.

The collected prints, known as the DASSONVILLE CAMERA CLUB TRAVELING SHOW, will be available to clubs having exhibition space starting in the fall of 1945. Clubs desiring this show should make application before June 1, 1945.

WHAT A HIT

THE NEW AND NOVEL
EMULSION ON FILM BASE

Has gained the approval of thousands of users. Try it yourself . . . you will like it. Order a package today. It is excellent for straight enlargements. Has wonderful tone qualities when dried in a few moments. Ideal for paper negative work in making direct positives from Kodachrome Transparencies. This material is "translucent" and perfect for oil portraits. It may be developed in your favorite paper developer. It is slightly harder than regular bromide projection paper.

1/2 Gross 5x7-\$2.75 1/2 Gross 8x10-\$4.25
1/2 Gross 15 3/4x16 3/4-\$9.95

(Prices F. O. B. New York)
Sell or trade your equipment now. High prices offered for valuable material.

HABER & FINK INC.
12-14 WARREN ST., N. Y. BA. 7-1230



WAR DEPARTMENT
OFFICE OF THE UNDER SECRETARY
WASHINGTON 25, D. C.

7 October 1944

To the Men and Women
of Photo Utilities, Incorporated
10 West 33rd Street
New York, New York

This is to inform you that the Army and Navy are conferring upon you the Army-Navy Production Award for great achievement in the production of war equipment.

The award consists of a flag to be flown above your plant and a lapel pin, symbolic of distinguished service to America, for every individual in your plant.

You men and women of Photo Utilities, Incorporated have made an outstanding contribution to victory. You have every reason to be proud of the record you have set, and your practical patriotism stands as an example to all Americans.

Sincerely yours,

Robert P. Patterson
Under Secretary of War

OUR EXPERIENCE AND PRECISION WILL BE AT THE SERVICE OF THE PHOTOGRAPHIC INDUSTRY AND TRADE—AS SOON AS WE BECOME AVAILABLE.

PHOTO UTILITIES, Inc.,
10 West 33rd Street, New York, N. Y.

GADGETS, KINKS AND SHORT CUTS

We pay from \$2 to \$7.50 for any Gadget, Kink, or Short Cut accepted by this column.

Reference File

Did it ever happen that you read an article in a photographic magazine or saw a picture and felt sure you would want to refer to it later but when you tried to find it you did so with much difficulty or perhaps not at all?

Here is a method of "keeping track" of formulae, methods, pictures, etc. which I find very convenient and which saves me much time in locating them.

First write on the magazine cover in which it is found, the subject covered and also the page number. In addition to this provide yourself with an indexed book, the kind with letters along the edge. Your book should not be less than about five inches wide and should have sufficient capacity to take care of your needs for some time to come.

Divide the pages into five vertical columns by drawing pencil or pen lines. In the first column put the name of the process you want to record, such as a developer formula or a method of cloud printing or a certain type of picture, such as a landscape or a tabletop.

In the second column put the name of the magazine in which it is to be found. In the third column, the month of issue, in the fourth the year, and in the fifth the page number.

Suppose, for instance, you read the article in the May, 1944, issue of *MINICAM PHOTOGRAPHY* beginning on page 70, concerning lens testing and you want to be sure of being able to refer to it later; your entry would be like this. First column, lens testing; second column, *MINICAM*; third, May; fourth, 1944; fifth, page 70. With the above information you can easily find this article after you have forgotten some of the details concerning the procedure. Or, if the picture on page 22 of the February, 1944, issue of *MINICAM* caught your eye, all you have to do is to put down "sheep picture" with the other information, and you haven't lost it, if you file the magazine away. After a few months or years you wouldn't take anything for your reference index.

Instead of drawing vertical lines for your columns, a dash may be used between the words where the line would be, this simplifies the procedure.—*L. H. Norris*.

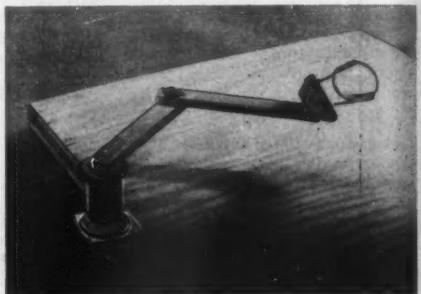
Close-Ups With A Movie Camera

DID IT ever occur to you that when taking close-ups of small objects it is possible to use your movie titler? The title card is removed and the subject is placed within the frame, or is composed immediately behind the frame opening.—*Benjamin Jacobson*.

Easel Magnifier

HERE IS an enlarging magnifier that is there when you want it yet it can be instantly folded out of the way and there is no danger of it falling on the darkroom floor when you reach for it. It is made so the swinging arm is detachable from the spool by lifting it out. This makes it practical to fold and store the magnifier in a small box when not in use. The wire clamp which holds the lens was made from a paper clip.

The magnifying lens is mounted on a hinged arm which permits it to be quickly swung to the desired point on the projected image. A small bolt, nut and lock washer hold the two sections of the arm together.



The wedge-shaped piece of wood to which the wire lens holder is fastened, is free to be turned as desired. A brad is driven into the wedge-shaped block through a slightly enlarged hole in the end of the wooden arm. A metal bearing, made from a piece of a tin can, protects the hole in which the brad turns.



The main pivot of the ever-ready magnifier consists of a spool fastened to a small platform at the side of the easel. The dowel at the end of arm turns inside spool.—*R. Scott*.



hat is
stantly
danger
en you
ing arm
it out.
ore the
. The
made
hinged
ung to
ge. A
the two

Make it a Christmas They'll Always Remember with WALT DISNEY

HERE ARE 35MM FULL COLOR TRANSPARENCIES



© Walt Disney Productions.

AND A
HOLLYWOOD
VIEWER

*A Christmas
treat for kids and
grown-ups too!*

which
to be
into the
enlarged
a metal
n, pro-

Wonderful full-color transparencies—perfect reproductions of Disney's original films in all the exquisite artistry of form and color! Enjoy them at home—on Christmas day and all through the year. There are 6 series of 10 slides each. One series shows close-ups of Disney characters. Five groups that are complete condensed versions of Disney feature pictures.

\$4.95

Hollywood Viewer complete with No. 1 series of 10 slides, attractively boxed.....

Individual story sets, 10 slides numbered in sequence, with story synopsis **\$2.50**
beneath each picture.....

1. Famous Disney Characters: Ten specially selected "close-ups" showing 24 leading characters.
2. The Story of Pinocchio: Highlights of the story, including selections from all major scenes.
3. Snow White and the 7 Dwarfs: Snow White, the Prince, the Old Witch and famous Disney Dwarfs.
4. Excerpts from Fantasia: Ostrich Ballet, the Centalettes, Winged Horses, Ice Fairies—etc.
5. The story of Bambi: Bambi, the deer, and his lovable forest companions—a real children's story.
6. Dumbo: Dumbo, the little elephant with the big ears—and a colorful circus background.

Mail Orders Filled

Willoughbys

World's Largest Camera Store Built on Square Dealing

32nd STREET NEAR 6th AVENUE

NEW YORK 1, N. Y.

Coffee Filters For Photographic Solutions

NOT every amateur photographer is fortunate enough to live in a district where water is perfectly clear. Some of us are always plagued with either rust particles or some other equally obnoxious ingredient.

These can be removed by the process of filtering which can be done on a fairly large scale by using coffee filters. The filter may



be folded up and placed in the top of a funnel. The solution to be filtered is then poured in and the filtrate will be found sparklingly clear.—Tracy Diers.

Mounting Paste

A CLEAN, print mounting paste can be made from starch and water. The household variety of starch is not suitable, a more refined quality such as that used by druggists should be purchased.

To a teaspoonful of the starch add a little water and mix to a stiff mass. Then add about four ounces of boiling water and stir until it reaches a jelly-like consistency; it is finished at this stage. If the compound doesn't gel, boil it for a moment or so. If still no good a new batch will have to be made. The prints to be mounted should be wet but with all surplus water wiped off. Lay them face down on glass or non-absorbent surface while preparing for mounting.

If a glass vessel is to be used in the mixing of the paste, place a silver knife in the glass before pouring in the boiling water. This will prevent the glass from cracking as the silver knife will absorb the heat instantly.—Herman Klein.

Removing Hot Bulbs

If YOU wish to remove a flash (or flood) bulb from the reflector while it is still hot, take the cardboard jacket in which the bulb came and put it on the bulb. Unscrewing the cardboard and the bulb at the same time will prevent burned fingers.—Victor Petrillo.

FOTOSHOP "The Nation's Color Headquarters"

• CAMERAS

Fotoshop offers a varied line of precision-built, one-shot color cameras, manufactured by the outstanding firms in the color field.

TYPICAL OFFERINGS:

6.5x9cm. Devin Tricolor Camera w/5 $\frac{1}{4}$ "—f4.5 Meyer Aristostigmat in compur. Complete with 3 sets—Registration Release Plateholders; Foc. Panel; Comb. Carrying Case.

Specially Priced—\$338.25

6.5x9cm. Devin Tricolor Camera w/5 $\frac{1}{4}$ "—f4.5 Goerz Dogmar in compur. Complete with 3 sets—Registration Release Plateholders; Foc. Panel-Lens Hood with Filter Adaptation; Comb. Carrying Case.

Priced—\$341.25

• EQUIPMENT

No effort has been spared by Fotoshop in providing every conceivable equipment for the color cameraman. Make Fotoshop YOUR color headquarters.

Curtis Mod. K Printer Kit (for Kodachrome or Ansco Color Separation).....

35.00

Crown Multiflash Units (for Synchronized Multiple Flash Photography).....

44.50

Marshall Densitometer.....

• SUPPLIES

Supplies for Wash-off Relief, Carbro, Ansco Color—both film and paper, and for other color processes are regularly carried in stock. Also a complete line of slide materials and accessories. Wash-off Relief Printing Assembly Ansco Color Film and Processing Kit, Ansco Color Paper and Processing Kit, Pan-Chroma Relief Printing Assembly.

FOTOSHOP HANDBOOK OF COLOR—A complete course on color photography..... \$1.00

Write today for information about these NEW color outfits.

FOTOSHOP, Inc.

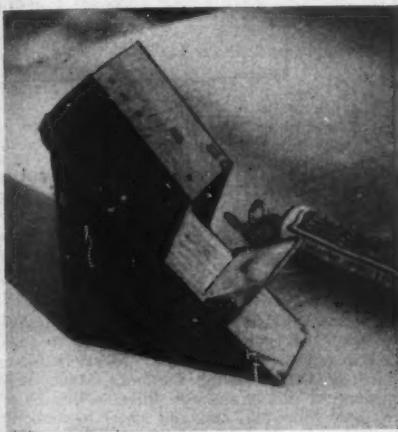
18 EAST 42nd STREET
Dept. 145 NEW YORK 17, N. Y.

Focussing Shield

ON SOME enlarger focussing devices, outside light cuts down the brightness of the



ground-glass image. This extraneous light may be kept out by shielding the ground glass with a light-proof hood. The hood can be made in a



few minutes from roll film backing and scissors. It is held in place by glue.—A/C D. Low.



"But Mr. Peabody, I'll call you as soon as they come in."



The *Federal* technique of manufacturing precision photographic equipment provides extraordinary quality at moderate prices. Our technique incorporates engineering high-grade materials and unsurpassed craftsmanship, with modern, precise, high-speed production facilities. These factors, properly organized and coordinated, have been largely responsible for the wide acceptance of *Federal* Enlargers among photographic enthusiasts from all walks of life.

At present, *Federal* is supplying critical photographic and electronic equipment to the Armed Forces. As a result of our application of this same *Federal* technique, we have been honored by four citations from the Army and Navy since September 14, 1942. Supplementing past performance, our current experiences will be reflected in improved *Federal* Enlargers plus many new and novel photographic devices which we shall offer at war's end.



\$1.40 SPECIAL \$1.40

35 MM Rolls 36 Exposures FINE GRAIN DEVELOPED ONLY. One print of each good negative; GLOSSY FINISH ONLY. Prints 3x4 with reload choice of film, all for \$1.40, 36 ex. without reload \$1.00; 18 ex. 60c. Reprints, 3 cts. each. Yes, we have bulk film, lots of it, guaranteed fresh. 27½ feet \$1.25—100 feet \$4.00. Choice of Dupont No. 2, Plus X or Supreme. Special prices in lots over (500) feet. 36 ex. reload 50c each. With your cartridge, 40c. We pay 5c each, for empty 35mm cartridges, any amount. Please remit with order. Save C. O. D. charges and delay.

ALLEN'S CAMERA SHOP
7424 Sunset Blvd., Hollywood 46, Calif.

Amfile ALBUMS

NEW
Willowcave
EDITION

DRAMATIZE YOUR TREASURED SNAPSHOTS

The smoothly woven binding, gayly colored, lends a country air to a sophisticated album. Black paper mounts, plastic binding rings. 6x7" size, \$1.75; 8x10", \$2.50; 11x14", \$3.50.

A Fine Gift for a Friend or Yourself. At stores or direct prepaid on money-back trial. Write for Free Catalog of Amfiles for Slides, Books, etc.

AMBERG FILE & INDEX CO. 1631 Duane Blvd., Kankakee, Illinois



35MM FILMS NOT DOLLAR DEVELOPING

We give your negatives deserve quality developing. No mass production. Individual attention to each negative. No scratches—guaranteed. Single or double exposure. Prints enlarged to 3 1/4 x 4 1/4. Beautiful quality prints guaranteed. Single wt. glossy paper, 36 exp. 8-4x6 Beautiful enlargements from 8 exp. roll, 72 exp. 16 exp. 18 exp., 36 exp., 40 exp. FREE mailing bags.

MICINAM PHOTO LABS.
Dept. 4, La Crosse, Wis.

CASPECO Perfect Image SCREEN

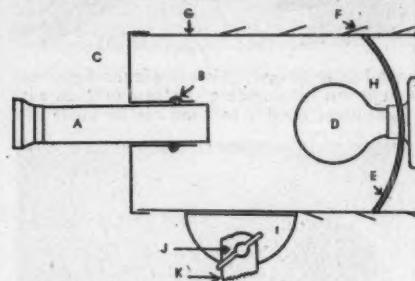


CAMERA SPECIALTY CO., 50 W. 29th, New York

Spot Light

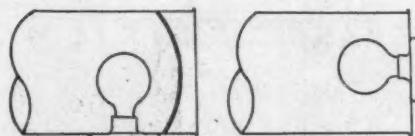
TO MAKE a pin-point spot light, secure the following materials: (a) 5 lb. coffee can. (b) one tennis ball can or baking soda can, or an old flash light case with a focusing lens. (c) One light socket. (d) a wingnut and some wood. (e) a sealed beam flood light or an old car reflector (head lite) or a watch glass. (f) chemicals from the drug store, a dry cell and two feet of wire.

The rig is assembled as shown in the sketch. For a reflector you have three alternatives; a sealed beam flood lite, an old car head light reflector, or a mirrored watch glass. If you



(A) Flashlight with focusing lens; (B) asbestos packing (arbitrary); (C) coffee can lid, with hole cut to take flashlight barrel; (D) globe; (E) reflector; (F) ventilation slits cut in can; (G) coffee can; (H) light socket; (I) semi-circular piece of wood screwed to can; (J) wing nut; (K) spotlight supporting stand of any type desired.

use a watch glass, or if the silver is worn off the headlight reflector, it is necessary to make your own reflecting surface. Metal is silver plated in the following manner. Make up a solution of 27 grams of Silver Nitrate, 65 grams of Thiourea, and add water to make up one liter (little more than a quart). Now clean the reflector carefully by first burnishing it with steel wool, emery paper or any other

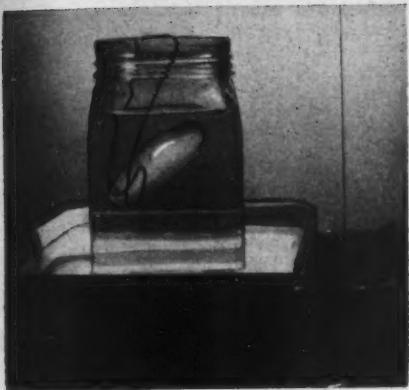


Alternate lighting set-up.

fine abrasive. Follow this cleaning with a good washing in carbon tetrachloride or any household spot remover.

By hanging the reflector in the solution by one wire, and hanging an old piece of silver (an old coin, medal or silver fork) from the other wire, and connecting these two wires to a dry cell, you will have the plating process in full swing. The negative terminal is connected to the reflector. If the silver plates too fast, toss in another handful of water and stir. The photograph below shows the set up. With this method you can silver plate almost any metal apparatus.

If you want to make a reflector out of glass,



Set-up for silver plating watch glass.

secure a "watch glass" of a diameter that will fit into the coffee can, or whatever can you are using. This glass can be purchased from almost any chemical supply firm and costs about ten cents. It should be cleaned thoroughly before use (nitric acid is a satisfactory cleaner). To obtain a silver reflecting surface on the glass, first make up two separate solutions. Mix solution "A" by adding: 6 grams of silver nitrate, 75 C.C. of water and enough brown precipitate that formed when you first ammonium hydroxide to dissolve the initial milky started adding the ammonium hydroxide.

Mix solution "B" in a separate container by dissolving 10 grams of glucose or sugar in 100 C.C. of water. Place equal parts of solution "A" and "B" in a container, then immediately insert the glass and warm almost to a boil by placing the solution container in a shallow pan of water and heating on a stove as shown in the illustration. As soon as these two solutions are mixed, the reaction starts.

The actual coating of the silver on the glass takes about ten to fifteen minutes, and the solution should not be agitated while the reaction is taking place.

After the watch glass is well coated, remove it from the solution with tongs, (unless you don't mind having stains on your fingers and nails). The watch glass will be silvered on both sides, so you'll want to rub the silver off one side. Before installing the reflector, coat over the silver with shellac, varnish, or sodium silicate. To assemble the light, bolt the light socket to the bottom of the coffee can in any one of the positions shown. Cutting ventilation slits at the top, bottom and end of the can prevents the silver coating from being exposed to excessive heat, which might cause it to deteriorate.

Next, cut a snug hole in the lid of the coffee can to fit the flash light barrel. Take the back off the flash light and remove everything except the focusing lens. By inserting this barrel and screwing a semi-circle of wood to the bottom of the can for a support, you are all set to attach the light, turn on the juice and make some striking pictures.—John F. Pruyn.



Brother, That is a Gift!

Perhaps you know a G.I. Joe who's getting set for the big show. Maybe he has a TIME-O-LITE and will give or lend it to you. If so you're a lucky guy because there'll be none for you until we finish our job with Uncle Sugar. In the meantime, cherish your TIME-O-LITE. It's a valuable piece of darkroom equipment, precision built to give you professional results. Electrical split second accuracy in enlarging, contact printing, flood lighting.

We want you to continuously enjoy your TIME-O-LITE. So if it's not giving you perfect service, return it to us for repairs. It may take a bit longer than usual to fix it—important war work comes first—but we'll put your TIME-O-LITE in first class shape and get it back to you. So in between buying bonds, use your TIME-O-LITE for split second accuracy in enlarging, contact printing and flood lighting.

INDUSTRIAL TIMER CORPORATION

101 Edison Place



Newark, N. J.

35MM BULK FILM!!

25 Ft. \$1.50; 100 Ft. \$5.00

- EASTMAN
- AGFA
- DUPONT
- SUPER XX
- SUPREME
- SUPERIOR
- PLUS X
- FINOPAN
- ULTRA SPEED
- Type 1, 2, 3
- PANATOMIC X

GUARANTEED 35 mm RELOADS (36 exp.) YOUR CHOICE — 49c EACH

Note: Empty cartridges required with order! OR, include
10¢ deposit.
Mail orders promptly filled. Postpaid or C. O. D.
MINIATURE FILM SUPPLY CO., 723 Seventh Ave., N. Y. C.



FREE!

Unusual Catalog
describing
MEDO'S
Collection of
Famous
Kodachrome Slides

Sports! Travel! Natural Gorges! full-color slides! Endless hours of fun for everyone! Remarkably low priced! 50¢ ea.

MEDO Photo Supply Corp.

15 West 47th Street • New York 17, N. Y.

DOVER MFG. CO., DOVER, N. H., U. S. A.

"Streamlined Optics"

TURNER-REICH—GUNDLACH—RADAR
KORONA WIDE-ANGLE BINOCULAR

Leaders since 1884 in quality optics. On your photographic lens, view camera, binocular, tripod, studio stand, multiple or reducing back, these names mean quality.

Ask your dealer—he knows quality.

GUNDLACH Manufacturing Corp.
Fairport, New York

MAKE MONEY COLORING PHOTOS

Fascinating new occupation quickly learned by average man or woman. Work full or spare time. Easy and understood method. Bring out natural, life-like colors. Many earn while learning. No canvassing.

Free Book tells how to make good money doing this delightful home work. Send for free catalog to men and friends. Send today for your copy. No obligation.

NATIONAL PHOTO COLORING SCHOOL
1315 Michigan Ave. Dept. 1941 Chicago 5, Ill., U. S. A.

**IF YOU WANT THE BEST
A TRIAL WILL CONVINCE YOU**

35mm. Film
Developed



36
Enlargements

18 exp. 75¢

We finish all other miniature and split size film in our famous $3\frac{1}{4} \times 4\frac{1}{4}$ Beauty Prints—Deckled Embossed Margin and Embossed Date. 8 exp. 42¢. 12 exp. 50¢. 16 exp. 62¢. Send roll and money or write for free mailers and complete price list. You will agree that our modern methods and long experience DO make a BIG difference.

Artistic Contact Finishing, 8 exp. rolls complete with deckled and embossed. $3\frac{1}{4} \times 4\frac{1}{4}$ margin prints. Credit for failures. FREE Enlargement coupon with each roll.

MAIL-BAG FILM SERVICE
Dept. 8, Box 5440-A, Chicago 60, Ill.

Kodachrome Slides

PARACUTIN, the western hemisphere's first new active volcano since 1759, and 11 other Kodachrome slides of Mexico's famed tourist spots are featured in a new series of Wesco slides being announced by Western Movie Supply Company, 28 Geary St., San Francisco 8, California.

The series, taken by Mike Roberts on his recent Mexico tour, includes the lacquer ware at Uruapan, the butterfly fishnets at Janitzio, the pottery market at Oaxaca, the Pyramids of the Sun, the ruins of Mitla, a native basket weaver, and views of Taxco, Xochimilco, and Cholula.

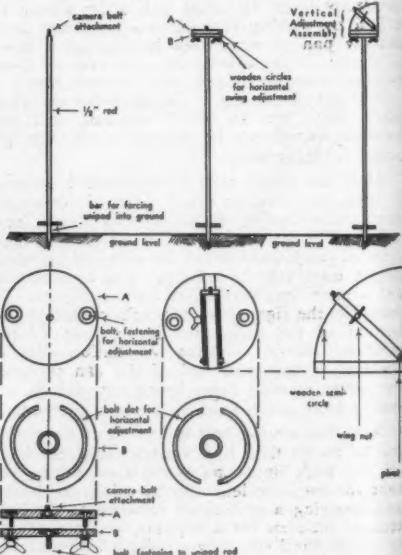
Packaged in a self-viewing panel, with captions by Mike Roberts, the set retails for \$5.85. It may also be obtained with the Wesco viewer, retailing at \$7.50 for the complete set, or in individual envelopes at 50c per slide.

Washing Roll Film

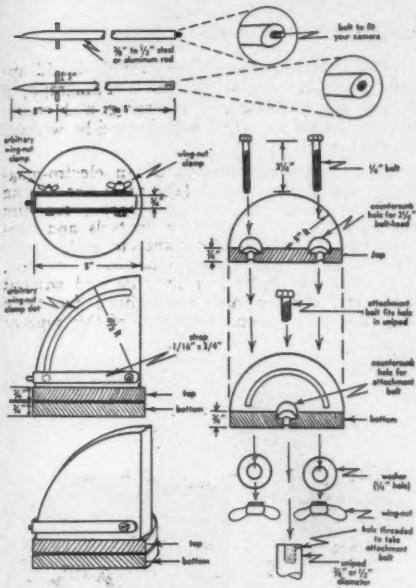
TO INSURE thorough circulation of the water, when washing roll film in a small tank, place a bakelite bottle cap, or object of similar size, in the bottom of the tank and to one side of the center. Next replace the spool in the tank, and put a funnel into the opening ordinarily used for the tank stirring rod. Let the water from the faucet flow into the funnel at a moderate speed. Occasional bubbles rising through the slot-openings in the side of the spool are a sure sign that the water is circulating up and through the film.—David L. Pansini.

Simple Unipod For Outdoor Work

THIS simple unipod is rigid, light to carry, can be used as a hiking cane, and can be made by any one. Three variations of the unipod are shown in the upper section of the sketch.

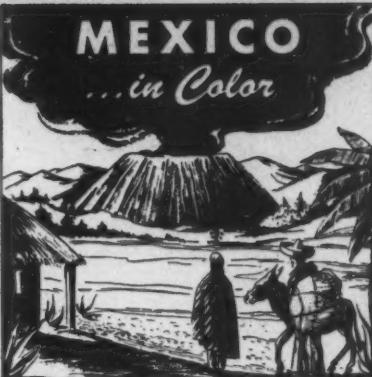
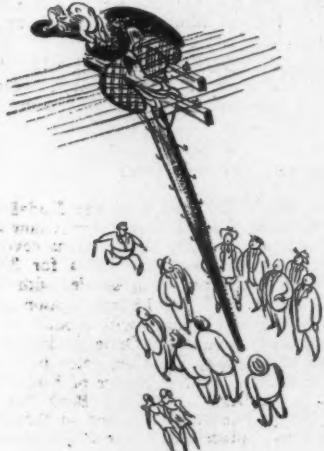


The rod may be shoved into the ground at any angle to get the vertical adjustment and merely twisted to get horizontal adjustment. The bar itself can be made of $\frac{1}{2}$ inch rod;



of course, aluminum rod is dandy, if you can get it, but steel rod serves very well. The adjustable head shown in the sketch may be made of plywood, regular wood or metal.

If you cannot make the circular slots, the carpenter in the local "fix it" shop can cut it for you in short order.—*Jack Pruyn.*



NEW *Wesco* RELEASE!

12 Kodachrome Slides by Mike Roberts

Headline-making PARACUTIN VOLCANO, exquisite lacquer ware at URUAPAN, the PYRAMID of the SUN, and nine other magnificent, colorful views of picturesque Mexico offered in this new Wesco release! All subjects taken by Mike Roberts on his recent Mexican tour. 12 slides in self-viewing panel complete with captions by Roberts...\$5.85 list. With Wesco viewer...\$7.50. Separately...50 cents each.

**Write for FREE folder in full color... or
see slides at your camera store**

WESTERN MOVIE SUPPLY CO.
28 Geary St. • San Francisco 8, Calif.



"THREE MONKEYS" CARTOON

In and out of one escapade after another. Thrills and laughs from start to finish.

50 Ft. 8mm\$1.25	100 Ft. 16MM\$2.50
Beauty Shop.....1202-A	Ship Wrecked.....1209-A
Golf Robot.....1206-A	Auto Race.....1213-A



See At Your Dealers or Order Direct.
For Prices and Catalog Write to:

HOLLYWOOD FILM ENTERPRISE, INC.
6060 Sunset Blvd., Dept. 102, Hollywood 28, Calif.

Typical
PEERLESS
Values!

WRITE FOR
Free
CATALOG D

BAIA PRECISION SPLICER	5	6.50
30x40 Crystal Beaded Wall Screen		2.50
30x40 Crystal Beaded Tripod Screen		9.95
750 Watt T-10 Projection Lamps		4.00
500 Watt T-10 Projection Lamps		3.50
SUNSHADE and FILTER KIT for 8mm cameras with Reverse Rayonet Bell and Bowles Circular Filters and aluminum camera lenses. Consists of Combination lensshade and Filter Holder and set of Type 1000 Rayonet and Vellum Filters		3.25
12" ALUMINUM CLAMP REFLECTOR with socket and cord		3.95
10" ALUMINUM CLAMP REFLECTOR with socket and cord		3.25
LIGHT STAND with Crossbar - 7 feet extended, collapsible		3.95
Deluxe LIGHTING OUTFIT consisting of LIGHT STAND, 10" and 12" CLAMP REFLECTORS and 2 No. 2 Photo Floods	11.75	
LIGHT STAND, 2-10" CLAMP REFLECTORS and 2 No. 2 Photo Floods	10.80	

PEERLESS H. R. PHOTO TRAYS—	
Insures chemical cleanliness. Not affected by acid or alkali solutions.	
3 x 4.	each .15
4 x 5.	each .20
4 x 6.	each .25
5 x 7.	each .30
8 x 10.	each .65

Limited Quantity in stock.
Minimum Order \$1.00.

GE INTERVAL TIMER with Alarm times accurately up to 2 hours	5.94
FR WATER FILTERS	4.65
KODAK PRINT WASHING ASSEMBLY—covers four prints in an efficient print washer	1.25
RUBBERIZED DARK ROOM APRON	2.10
PEERLESS FILM DEVELOPING TANK adjustable from 35mm to 116	1.25
FEDCO CUT FILM DEVELOPING TANK	2.49
1 1/4" x 10" TRIMMING BOARD	3.85
PEERLESS RETOUCHING OUTFIT consisting of Retouching needles, Varnish, Acetate Ink, Sepia Ink, Opaque, Pumice, New Cocaine and full instructions	3.95
MARSHALL OIL COLOR SETS—Rainbow Set	2.75
PEERLESS VINTAGE DOCUMENTS	2.00
for 25 slides—35mm and 16mm and 8mm film	1.39
LEUDI EXPOSURE METER with case	1.75
X-ACTO KNIFE with fine point cutting knives made of surgical steel. Knife with 6 interchangeable blades	1.00
Double set with regular knife. Mat knife and 12 interchangeable blades	2.00
SPOTONE—ideal, modern retouching medium for negatives and prints	1.39

PEERLESS
CAMERA STORES

128 EAST 44TH STREET NEW YORK, N. Y.
Phone MURRAY Hill 3-7288

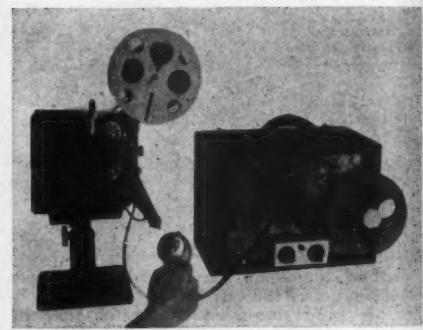


PRODUCTS

Sound on Film Equipment

A MODERN development which should appeal to home movie makers is Filmgraph, a device for permanently recording and reproducing sound on film instantaneously without processing.

This instrument consists of an electro-magnetic dual-purpose head (the same head being used for recording and play-back), sapphire stylus, motor and necessary controls and connections. It is available complete with amplifier, speaker and microphone in a cabinet, weight about 16 lbs., or may be had without amplifier, speaker and microphone for those who have their own equipment of this type or



who may want to use the amplifier of a good radio.

Filmgraph M-5 special film sells at 85c per 100'. With 40 tracks across the film and at a film speed of 24' per minute, a single sound track on 100' of film would cost about 2 1/4c or a little over 10 1/4c for 500'.

Illustrated bulletins describing this device may be had from the manufacturer, Miles Reproducer Company, Inc., 812 Broadway, New York 3, N. Y.

Kodachrome and Kodacolor

THE NEW EDITION of the Kodak Data book Kodachrome and Kodacolor is now available from your dealer. Instructions cover still pictures with Kodachrome Films for 35-mm. and Bantam cameras, color movies with Kodachrome Films for 8 and 16-mm. motion picture cameras, and still pictures with Kodacolor Film for roll film cameras. There is information relative to lighting, exposure, color prints, and new information on the storage of Kodachrome films. In addition, this Data Book has been especially planned and punched so that it can be used to replace the Color Films section of the Kodak Reference Handbook.

BULK 35 MM. FILM RELOADS

GUARANTEED FRESH STOCK. "RELOAD YOUR OWN"

AGFA-EASTMAN-DUPONT

25 FT. \$1.50 + 50 FT. \$2.75 + 100 FT. \$5.00

POSTPAID

CARTRIDGES RELOADED 3 for \$1.25 W/125 CARTRIDGES

CALIFORNIA BUYERS INCLUDE SALES TAX

PACIFIC COAST FILM COMPANY
1416 NO. 5 EERA SONITA, HOLLYWOOD 46, CALIF.

101 PRIZES (In War Bonds and Merchandise) TOTALING OVER

\$1700.00

For the **BEST BLACK and WHITE PRINTS**
JUDGED SUITABLE for COLORING with

MARSHALL'S
PHOTO OIL COLORS

GRAND \$500⁰⁰ PRIZE

WAR BOND

Yes—over \$1700.00 in prizes—and here's all you have to do. Select the best prints you have that fit into the five specified subject divisions. Make unmounted 8" x 10" (or larger) matte prints of each. Write your name, address and dealer's name (if any) on the back of each print. Mail all entries to Contest Editor, John G. Marshall, Inc. by midnight, March 10, 1945.

3 SIMPLE RULES

1. Prints must be on matte paper.
2. Prints must be 8" x 10" or larger.
3. Prints must be unmounted.

5 Subject Divisions

1. Children
2. Portraits
3. Landscapes
4. Still Life
5. Pets

CONTEST CLOSES MARCH 10, 1945

The decision of the judges will be final. No prints can be returned. All rights in prize winning prints shall become the property of John G. Marshall, Inc., to be used by them in any manner or form. The contest is open to everyone except the officials and employees of John G. Marshall, Inc.

JUDGES: Ivan Dimitri, Joseph Lootens, Mabel Scacheri,
John Rowan, Norris Harkness.

JOHN G. MARSHALL, INC. 187 NO. 8TH ST.
BROOKLYN 11, N. Y.

PRIZES

5 \$100 WAR BONDS
One for each 1st prize in
each subject division.
\$500.00

5 \$50.00 WAR BONDS
One for each 2nd prize in
each subject division.
\$250.00

5 \$25.00 WAR BONDS
One for each 3rd prize in
each subject division.
\$125.00

85 ADDITIONAL PRIZES
for honorable mention
in all subject divisions.
\$382.50

PLUS

GRAND PRIZE

\$500⁰⁰

(War Bond)
FOR THE ONE BEST PRINT OF ALL

101 PRIZES
TOTALING

\$1757.50

Prize winning pictures in each subject division will be sent on a tour of the nation to be exhibited and voted upon by the public. The one print voted best will be awarded, in addition to whatever prize has been won, the Grand Prize of \$500.00 in War Bonds.

ELKAY BLOWER

Double unit model for **\$14.95**
ventilating one or two darkrooms. Changes 200 cu. ft. of air per minute. Heavy duty motor.

Single Unit Model, \$9.95

ELKAY PHOTO PRODUCTS, INC.
287 Washington Street, Newark 2, New Jersey

Buy More War Bonds

Respond
BUY WAR BONDS
... and YOUR NEW G-M PHOTO ELECTRIC Exposure Meter will be available sooner

G-M Laboratories, Inc., Chicago

BEHIND YOUR CONSCIOUS MIND

Do you use just your thinking mind? If you do, you are missing 90 per cent of your possibilities. Those occasional hunches are the urges of a vast sleeping force in your inner mind. Learn to develop and direct it. Push obstacles aside and master life with an energy you have overlooked. Send for FREE SEALED BOOK. It tells how to obtain these teachings. Address: Scribe T.B.S.

The ROSICRUCIANS
SAN JOSE [AMORC] CALIFORNIA

YOU'LL BE DELIGHTED \$

35mm. FILM
DEVELOPED
36 ENLARGEMENTS

8 EXP. ROLL ENLARGED, 35c
16 EXP. SPLIT ENLARGED, 55c

Prove it to yourself—send your next roll to us. Fine grain developing, "electric-eye" precision. Modern Beauty prints $3\frac{1}{4} \times 4\frac{1}{2}$, deckled, with embossed margin and date. If less than 25 prints Free print credit. Send money and roll or write for FREE Mailers.

Professional contact finishing. 8 Exposure roll developed and complete set of Super Professional prints. Print credit for poor exposures.

U. S. PHOTO SERVICE
Box 5710-A Dept. E Chicago 80

25

Photographic Catalog

WARDS 1944-45 Photographic Catalog is available free from any of the Montgomery Ward mail order houses. The booklet not only includes a list of all photographic merchandise stocked, but also has general information on cameras, lenses, shutters, and accessories, which will be of help in selecting equipment. When writing to main office, address Montgomery Ward, Chicago, Illinois.

Portrait Paper

A NEW TYPE of enlarging paper, for portraits, has been developed by the Kilborn Photo Paper Co. of Cedar Rapids, Iowa. Kruxo paper has a warm tone, and any tone may be obtained from black to red by slight manipulation of the developer. In this way it is possible to obtain sepia in first development. The paper is supplied in single-weight matte, single-weight proof, smooth matte and fine-grain matte double weight. The embossed stocks on which the portrait enlarging emulsions are coated are limited for the duration.

Eastman Is Producing Gunsight

A NEW "mechanical-brain" gunsight which directs the machine-gun fire of combat planes is giving Allied pilots greatly increased shooting efficiency in the European theater.

The pilot "dials" the type of plane his enemy is flying, the range, and other factors, and the gunsight electrically directs his accurate, hard-hitting fire from there on.

The British design was adapted for manufacture in this country by U. S. Navy Bureau of Ordnance, Eastman Kodak Company, and Bendix Aviation Corporation experts.

Until recently the various elements of the gunsights have been manufactured by Bendix, Kodak, and the F. A. Smith Corporation of Rochester. Now other manufacturers are also engaged in the project to meet the increasing requirements of the United States air services.

The instrument is an electrical-gyro computing mechanism consisting principally of a sighting head through which the pilot sees the target. Superimposed on the target, he sees a circle of illuminated dots produced by the sight mechanism. The pilot's task is to keep the enemy target within the gyro-controlled circle. As long as the enemy plane remains in the ring, the angle of attack will not matter, and the pilot will surely register a "bull's-eye."

Toner

QSE ROYAL TONER is introduced by Swain Nelson Laboratories of Glenview, Illinois, as a companion product to their QSE Ultra Fine Grain Developer. The new toner produces six royal tones ranging from blue-black through different purples to sepia or rich brown. Only 4 to 60 seconds are required to secure the various tones, and there is no necessity to change the solution or worry about variance in temperatures.

for Better Pictures

Focus AND FLASH with "KALART"

DELUXE MODEL "E" RANGE FINDER

All features of the famous Kalart Model "E" plus war developed improvements make the Deluxe "E" Lens-Coupled Range Finder an outstanding precision instrument.

KALART FOCUSPOT

Used in conjunction with the Kalart Deluxe Model "E" Range Finder the Focuspot gives you needle sharp focus even in total darkness.

MASTER SPEED FLASH

The improved Master Automatic Speed Flash (illustrated with the accessory Kalart Concentrating Reflector for midget bulbs) is now adjustable to all speeds for both gas-filled (SM or SF) as well as regular flash bulbs.

Write for FREE literature
describing these Kalart
Precision Products.



The KALART COMPANY, Inc.
Dept. C1
Stamford, Conn.

BUY BONDS
TODAY

... focus and flash with "KALART" ... TOMORROW



Processing, Printing and Editing Kit

THE HOUSTON CORPORATION, 11801 West Olympic Blvd., Los Angeles 25, announces a new processing, printing and editing kit for 16 mm. positive and negative motion picture film. The kit consists of two separate units—the developer and the darkroom—which may be set close together or moved to any convenient location. The entire kit is designed for portability and limited space.

Film is completely processed at a speed of 120 to 360 feet per hour. Cycle of processing is accomplished in 35 minutes, including drying. Operation may be either in daylight or darkroom. The processor measures only 18" x 37" x 36 1/2" and the accompanying darkroom measures 17" x 38" x 54". All auxiliary equipment necessary for the completion of an entire motion picture is contained in this streamlined cabinet—rewinds for loading film on developer flanges; a 16 mm. continuous printer, which operates at 20 ft. per minute and is equipped with selective light changing compensation for varying negative densities; an editing viewer; splicer.

The viewer is of rotating prism type and enlarges the 16 mm. image to 2 1/4" x 3 1/4". Continuous or still projection is possible. Mounted on top of the viewer is a small light box, in which

a varying density negative has been mounted. The varying densities on this negative are calibrated to match the printer density control, which may be set for the varying density of the negative as it passes through the printer.

The lower compartment provides ample space for storing other items, such as a dual-purpose motor for providing power to the developer circulating pump and to the compressor for the air squeegee. All necessary hose and couplings, as well as flanges, staples, extra leader and spare parts, may also be stored in this lower compartment.

Four-way Viewer

A NEW De Luxe Model Hollywood Viewer has been announced by Craftsmen's Guild, 1668 North Van Ness Avenue, Hollywood 28, California. This new viewer has an adjustable eyepiece for perfect focusing and, in addition, is furnished with film tracks for 35mm, 16mm, and 8mm strip film which it holds in perfect alignment. This viewer can be used with equal efficiency for viewing 2x2 slides, for editing 16mm and 8mm film or for examining 35mm negative film. The viewer has a ground and polished lens which gives excellent magnification and the design of the plastic case is attractive. The viewer and three film tracks are included in one package at \$3.50.

ACTION SHOT!

• Wherever ACTION is taking place, there you'll find HEILAND synchronizers at work—getting the best shots. This dependable equipment is available now for priority orders. Soon available, we hope, for all. Look for the HEILAND name if you want the quality and dependability of this famous precision equipment.

Representatives and Service

7282 Beverly Blvd.
Hollywood 36, Cal.

431 So. Dearborn
Chicago 5, Ill.

HEILAND FLASH SYNCHR(R)NIZERS

1/400 at F.16, 15 feet.
No. 5 bulb at camera,
No. 22 bulb on extension.
Super Pancho
Press, Sports Type Film.



HEILAND RESEARCH CORP., DENVER, COLORADO

mounted.
e are cali-
y, control,
sity of the
nter.
mple space
al-purpose
eloper cir-
for the air
cupplings, as
and spare
r compart-

od Viewer
n's Guild,
ywood 28,
adjustable
n addition,
m, 16mm,
in perfect
with equal
or editing
ing 35mm
round and
magnifica-
case is at-
tracks are

D
S

Character Portrait
OF AN AMERICAN CITY
WORTHY OF
VELOUR BLACK



NEW YORK... probably the most-photographed city in America. Yet in its thousand changing faces, there's always one more picture, a little better than the last, a little more expressive of the dreams and the shattered hopes that lie buried beneath its piles of stone and steel. But whether your attempt to capture the spirit and tempo of New York on film is an upside down heaven spangled with a million man-made stars or whether you see its majesty mirrored in the awed face of a

child who is beholding it for the first time, there is one thing you will want to make sure of. You will want to make sure that the print from your negative is made upon Defender Velour Black.

Properly printed upon this great projection paper, you can be certain that the detail, the expressive shading of light and shadow which you worked so hard to capture upon the negative will be there for all to see and enjoy.

Velour Black is available at your Defender dealers now... in the blue and yellow package.

Defender



DEFENDER PHOTO SUPPLY CO., INC., ROCHESTER 3, N.Y.

WE HAVE FILM!

Yes, we have film! And we have plenty of it. It's perfect. No scratches. No short ends. We have guaranteed fresh DuPont film at these low prices. Good, clean, brand new film!

36 exp. roll 35mm., 50c; 3 for \$1.25
18 exp. roll 35mm., 35c; 3 for \$1.00

If you prefer to buy in bulk order at these low prices:
25 ft. — \$1.50; 50 ft. — \$2.75; 100 ft. — \$5.00!
We send our cartridges to War, so now we need yours! We'll pay you 50¢ per cartridge for empty film cartridges you send us. The more empty cartridges you send us, the better we can serve you. So send us empty cartridges TODAY! Help civilian photography survive the War!

35mm FILM DEVELOPED & ENLARGED 60¢

We give you brilliant, "Magic Eye" Timed, Vapo-rated. 3x4 enlargements on Deckled-Edged Velox paper at these low prices: 36 exp. \$1.00; 18 exp. 60c; 16 exp. No. 120 rolls, 36 exp. \$1.00; No. 828 Bantam, etc., 25c; reprints, 3x4, each 3c, 24-hour service. No delay. Not too fast. Not too slow, but just right for super prints. Write for FREE Mailers, details, FREE Premium offers!

AMERICAN STUDIOS
Dept. 418

La Crosse, Wisc.

RATE

PROTECTION
FOR MOVIE FILM
against
WEAR ... OIL
WATER
CLIMATE
SCRATCHES
FINGER-
MARKS



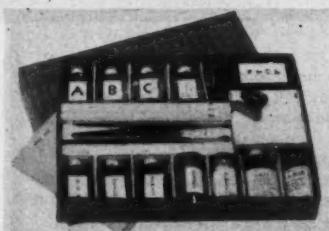
ONE
TREATMENT
LASTS
THE LIFE
OF THE
FILM

Ask Your Dealer

Vaporate Co., Inc.
130 W. 46th St.
New York City

Bell & Howell Co.
1801 Larchmont, Chicago
716 N. LaBrea, Hollywood

MASTER RETOUCHING OUTFIT



The most complete outfit on the market, suitable for every type of retouching. Outfit includes 12 bottles of assorted colors and chemicals to meet every retouching problem; finger fitted etching knives, 12 of Dixon Retouching Pens, two sets of hair brushes, sponge, sandpaper, pumice, two droppers, cotton and abrasion sticks. All well packed in firmly built, fitted box. Complete instructions for use. Braun Laboratories specialize in Retouching and Darkroom Chemicals. Catalog on request. At your dealer, or order direct. Price \$5.95.

O. S. BRAUNSTEIN
206 So. Hutchinson St., Philadelphia 7, Pa.

BICO COLOR TITLER

THE TITLING UNIT here described is useful both for the movie fan and to the fellow who wishes to add a professional touch to his showing of Transparency Slides. The set consists of a 9x12 board, covered with colored felt and lined with grooves. One hundred double-wing acetate non-inflammable letters are part of the unit. The box is subdivided into compartments for convenient alphabetical arrangement of letters.

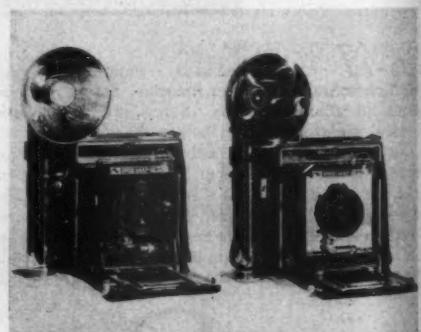
By inserting the letters and symbols into the grooved board, titles with attractive background can be made practically in unlimited varieties. Simple directions are enclosed with each set.

An additional and rather interesting possibility for color titling presents itself in connection with Kodachrome Transparencies. Titles are made up to comment upon slides, explain sequences, etc., and are a great convenience and attraction both for the demonstrator and his audience.

The color scheme of the Bico Titler is favorable for Kodachrome motion pictures as well as slides, and adds latitude in regard to lighting and exposure. Set lists at \$4.00. A product of L. R. Biber Co., 1974 Broadway, New York 23, N. Y.

Aluminum? . . . Yes, Aluminum!

ALUMINUM LENS BOARDS for Speed Graphics and similar cameras are now available



in all sizes from the Nicholson Products Co., 5208 Wilshire Boulevard, Los Angeles 36, California. List price \$2.95 plus 19 cents excise tax.

ibed is
the fellow
a to his
set con-
red felt
double-
non-in-
ers are
it. The
led into
for con-
alphabetical
letters.
the let-
ols into
board,
tractive
can be
ally in
varieties.
ons are
ach set.
inal and
ng pos-
in con-
encies.
n slides,
at con-
demon-

titler is
tures as
gard to
4.00. A
oadway,

Speed
available



cts Co.,
6, Calif-
cise tax.



WILL YOU WANT AN EXTREME WIDE ANGLE PROTAR?

 So many jobs assigned to the expert photographer demand wide angle coverage—that's why Bausch & Lomb developed in the Protar V a very high degree of correction for flatness of field and astigmatism to meet your most exacting requirements. Speed enough for instantaneous exposure, sharp to the very corners of the negative. Extra covering power for use with rising-falling front and other camera adjustments. Adapted to the demands of Kodachrome and panchromatic.

Ideal lens for architectural and interior photography. Useful for every type of wide-angle commercial and technical work.

Decide now whether this Protar V—or a wholly new wide-angle lens to be announced—should head the list of new lenses you'll want to buy when your dealer again has Bausch & Lomb lenses in stock.

Certain Bausch & Lomb lens equipment can be purchased now, with proper WPB rating.



Massive mapping cameras like this are used in specially-built planes to give our fighting men the best photographic intelligence service in the world.

BAUSCH & LOMB
OPTICAL CO. • ROCHESTER, N. Y.
ESTABLISHED 1853

AN AMERICAN SCIENTIFIC INSTITUTION PRODUCING OPTICAL GLASS AND INSTRUMENTS FOR MILITARY USE, EDUCATION, RESEARCH, INDUSTRY AND EYESIGHT CORRECTION



The
Aristocrat of
Kodachrome Slides

PRICE 50¢ EACH

Here for your pleasure are over 800 beautiful Kodachrome slides. Nature's beauty captured in full color. Select any quantity from the list below.

Yosemite	(24 views)	Dinosaure Park, N.D.	(6 views)
San Francisco Fair	(12 views)	Mayo Clinic	(6 views)
Alaska's White Frontier	(8 views)	New York City	(12 views)
California Big Trees	(16 views)	Washington, D.C.	(6 views)
Crater Lake	(12 views)	Oriole Mts.	(6 views)
Columbia River Hwy	(6 views)	Mt. Rushmore	(6 views)
Mt. Rainier	(6 views)	Bad Lands of S.D.	(6 views)
Yoho Park	(8 views)	Taos Indians	(12 views)
Lake Louise & Banff	(8 views)	Forest Loden, Calif.	(6 views)
Glacier Park	(24 views)	Ghost Town	(6 views)
Yellowstone	(10 views)	Pass on Rose Parade	(6 views)
Tablemound, S. D. C.	(6 views)	Univ. of Michigan	(6 views)
Teton Forest	(6 views)	Gutenberg	(12 views)
Death Canyon	(8 views)	Mexico	(6 views)
Hoover Dam	(6 views)	EUROPEAN SECTION	
Grand Canyon	(24 views)	San Juan Capistrano	(6 views)
Painted Forest	(8 views)	Santa Barbara	(6 views)
Palm Canyon	(6 views)	San Gabriel	(6 views)
Lake Arrowhead	(12 views)	San Luis Rey	(6 views)
Big Bear	(6 views)	Palo and San Diego	(6 views)
Los Angeles	(12 views)	SOUTH AMERICA	
Death Valley	(12 views)	Argentina	(10 views)
Hollywood	(12 views)	Brazil	(6 views)
Zion Park	(8 views)	Chile	(24 views)
Virginia Falls	(6 views)	Colorado	(6 views)
Mississippi River	(6 views)	Egypt	(24 views)
Painted Desert	(6 views)	Germany	(12 views)
Oak Creek Canyon	(6 views)	Peru	(10 views)
Sunset Crater	(6 views)	Ports of So. America	(6 views)
Walnut Canyon	(6 views)	Uruguay	(24 views)

Color slides of important points of interest in the European Empires of war as well as war trophies and slides of our battle-fields from both sides by Louis Compte, Arthur Beaumont, Verne Beck, etc. (12 views each) Italy (6 views) France and Naples (12 views) Germany (6 views) Russia (12 views) Turkey (12 views) Japan (12 views) Egypt (12 views) Malta & Yugoslavia (6 views) Navy Ships in Action (12 views) Athens, Greece (12 views) War Pictures of Africa (12 views)

ALL SLIDES SHIPPED SAME DAY YOUR
REMITTANCE RECEIVED

American Masterpieces
BELL CALIFORNIA

**35 MM DEVELOPED \$1.25
FILMS** Send your 36 exposure roll to us.

You'll get professional fine grain developing reported to prevent scratching, with each good exposure enlarged to 3 1/4 x 4 1/4. We do not use automatic or mass production machines, but each negative is given individual attention. 16 exposures roll to us.

Full Size 4x5 enlargements from 8 exposure rolls 35¢

NOTICE—We have a fresh supply of film on hand for your 35mm camera at no increase in price.

UNIVERSAL PHOTO SERVICE, Box 612B, La Crosse, Wis.

**THE WIDEST CHOICE
OF FINE GRAIN FINISHING**
11 Different for 35 MM FILMS
14 Different for ROLL FILMS

Studio Enlargements in Folders and Mats
SALON EXHIBITION ENLARGEMENTS
AMATEUR FOTO GRAPHIC SERVICES, INC.
128 W. 46th St., N. Y. 19, Dept. M, LO. 5-5483

Mr. "Minicam" Himself, and God Bless Him

Sir:

I fear this will be rather longwinded. I always write long letters after a raid . . . it kind of lets me back gently into everyday routine. Amateur photographers over here are going strong, and whereas at the beginning of the war I gave only about two lectures a month to photographic societies, I am now booked for two a week. The first of every month finds the photo fans queued up outside the dealer's door waiting to buy his film and paper quota. As you undoubtedly know, we have only a couple magazines running which cater for the amateur, *Amateur Photographer*, and *Miniature Camera Magazine*. I write for this one under the pen name "Minicam." The latest fad is the Inter-Club Competition. You know the kind of idea. One club challenges another, and each sends a dozen prints which are hung without means of identification. The judge then strolls around, and awards points to each picture, and so on.

Most Tuesday evenings I have a couple of American headquarters fellows to my home. They're great mixers, and we have great fun playing over swing records, and, of course, arguing about things in general. One of them, is a private first class, known as Shorty, and to hear him talk you'd think that Trenton, New Jersey, is Utopia.

Photographic topics over here revolve 'round such things as formulas for getting good prints from stale paper, and it may interest you to know that we seem to make the grade with stock marked "Expiry date 1938". The prints I enclose were made on Kodak paper I bought in 1939. A new fine-grain formula has just broken into our midst. I can't tell you much about it now, but I can assure you that it is really fine grain. My tests were made with one of the fastest emulsions I've ever used, Ilford HP 3, which is rated at 32° Sch. With normal exposure, the negatives provided enlargements of 20 diameters and although there is a slight falling off in definition, there isn't the slightest sign of grain. I am getting the formula sometime this week, and if you'd like further details I'll send them gladly. Incidentally, it isn't a PPD formula, but I understand it has Pyro and Kodalk, with something else . . .

As I stepped out of the door of the demobilization depot sometime around February, 1919, I spotted a whopping big reflex camera staring at me from a dealer's window across the street. I left the army depot with £40 but I came out of the photo shop with only £7. It was a P. C. outfit and although I played around with it hard and fast, I never made much headway. In a few months I'd sold it for £14, and got a V. P. camera. And so I went on through the years swapping this for that, but to my knowledge I never produced a real picture until I became a Contax 1 fan. That was 12 years ago. My regular job is Art Director with one of London's largest advertising agencies.

Well, I think that is about all. I feel better.

HENRY G. RUSSELL, A. R. P. S.
61, Ebury St., Victoria,
London, England, S. W. 1.

Virginia Learns to Be a Photographer

(Continued from page 29)

tions of film and paper and lens, and how to put those advantages to work.

Virginia had thought of the camera as being literal . . . a sort of copying device. But when she realized it was so much more; when she understood the limitations and how to use them in the making of pictures, her mind came alive with enthusiasm. Then, only, did she realize that the photograph could be more real than literal, more beautiful than the thing photographed, more exciting than the scene itself.

A muddy, smelly backwater could become a thing of beauty when a dying sun gilded it with sparkling, glancing light. Ugly detail became subdued in the against the light shot. Mud and smell were gone in the final print. Textures, which her eyes had never seen, leaped into fascinating, exaggerated brilliance under strong cross lights. She learned to control subject contrasts by varying the time of negative development.

Virginia's dissecting mind and probing questions put me on the spot . . . made me think.

It has always been considered difficult to compare prints of differing subject matter . . . some say impossible. How can one compare a portrait with a landscape, or dogs with sailboats, or mountains with babies?

Today I know. Answering those multitudinous questions provided the answer. A system was evolved for judging regardless of subject matter. I use it in evaluating my own work when it still drips hypo; in judging at camera clubs; in salons. I teach it to my students. When they have discovered these fundamentals, they become better photographers, better able to look at their own efforts with less prejudiced eyes.

As I've said, it's lots of fun.

Virginia never had the great trouble learning to crop prints that most beginners find so difficult. Today, she is almost ruthless in her cropping of prints. That is a part of the strength of her work.



BUILT TO TAKE IT

DeJur "Critic" Exposure Meters have gone through some of the toughest fights of this war. They've been jarred, bounced, thrown and "drowned" . . . but, from what many users tell us, these instruments have a remarkable record of accurate service.

DeJur "Critic" Exposure Meters are dependable because they are dependably built. From design to engineering, from workmanship to materials, they provide the most in long years of satisfactory performance. All DeJur "Critic" Exposure Meters now go to the Armed Forces . . . wait for their return to civilian photography.



Buy and Hold More War Bonds

DeJur-Amsco Corporation

NORTHERN BOULEVARD AT 45TH STREET
Long Island City 1, New York

"BETTER PICTURES" 1.00

Any 35mm ROLL — 36 exposure developed and printed to size $3\frac{1}{4} \times 4\frac{1}{2}$ \$1.00. 18 EXPOSURE ROLL — 60c. No. 127 SPLIT CANDID ROLL — 16 exposure developed and printed to $3\frac{1}{4} \times 4\frac{1}{2}$

Films fine grain developed, enlarged to give contact quality. Prompt service. Send roll and money today. ALL REPRINTS 3c EACH. VAPORATED—10c Addl. Per Roll.

BETTER PICTURES

2523 Lawrence Avenue Dept. M Chicago 28, Ill.
Send 5c stamp or coin to cover mailing charges.

TAKE IT IN STEREO!

That's the way the Army and Navy take pictures! No "flat" print can compare with a stereoscopic transparency (especially in color) made and enjoyed with the Stereo-Tach and Viewer Outfit No. 101 and your 35mm. camera. Still available at... For Stereo prints, both 35mm. and other size cameras, Outfit No. 100

*Plus tax; slightly higher west of the Rockies.



\$22.50*

\$14.75*

See your dealer or order from

ADVERTISING DISPLAYS, INC.

Dept. A-9, Covington, Kentucky

get Perfection in your
COLOR MOVIES

with this

P-B FILTER KIT

For all 8mm B&H, Keystone, Revere and Cleemaster 13.5 cameras.

- Eliminate glare and light streaks!
- Penetrate haze for clearer background!
- Convert Kodachrome "Type A" to daylight use!

(Kit contains Screw-in shade, Filter holder, Hasselblad Type A Conversion Filter and Filter Pouch.)

\$4.90

Complete set
(excl. filter
incl.)

WHILE THEY
LAST!

Sent post-paid if
cash with order—
or sent C.O.D. on
receipt of \$1.00.

HOLLYWOOD
MOVIE
SUPPLY

P. O. Box 870
HOLLYWOOD 28,
CALIFORNIA

35 MM FILM FINE
GRAIN

DEVELOPED, VAPOURATED
AND ENLARGED

MINILABS

STILL FIRST IN 35 MM
FINE GRAIN

FILM PROCESSING, DIRECT BY MAIL

36 exposure roll of film pro-
cessed & enlarged to 3x4 inches \$1.00

8 exposure rolls enlarged to
approximately twice negative size for only 25c

Ask for Free Booklet Magazine, "Pictures."

MINILABS

Inc.
ENGLEWOOD, NEW JERSEY

Box 485

Portraits By Daylight

(Continued from page 35)

musical composition. Certain keys are in harmony with the original idea of the composer, while again, even a half tone transposition creates an emotional change so marked, that it is almost a different composition although the same melodic line may be used. For example, in the *Portrait of A Young Boy*, little manipulation was resorted to because the emotional quality of the print would have been lost had the hands been held back in printing to appear whiter. The face, unevenly lit by the way in which the light fell on it, the dark sweater, and the brilliant white collar are all in harmony. The close values of the skin would have been lost, even in the darker areas where the actinic rays are effective. It is particularly in these dark areas that luminosities are most pleasing when utilizing daylight. To have over-manipulated the printing would have been to destroy the structure of these gradations. The eye is unable to register these close values which the emulsion is sensitive to, and which once registered, should not be arbitrarily slurred and destroyed.

The advantages of daylight portraiture are stressed in the full knowledge that fast-lighting techniques which facilitate rapid exposure under all conditions have increased the creative range of the camera. Indeed, these techniques are the basis for the existence of modern news and action photography. Lacking high-speed film and the flash-bulb we would not have, for example, Weegee's sensitive side-walk documents. We must recognize the value of such scientific aids in lighting and acknowledge their indispensable role. Nonetheless, it should not be forgotten that the photo-flash and the photo-flood lamp are, at best, but inferior man-made substitutes for the real thing. And that many modern photographers like Edward Weston still prefer to work, as did Hill and O'Sullivan almost one hundred years ago in the dawn of photography, with the simple, unique, and inexhaustible possibilities in the light of the sun.



How Soon Will YOU Join N.Y.I.'s Success Parade?

The N. Y. I. graduates whose photographs are shown were all featured in our advertisements during 1944. These men and women come from every walk of life. Many knew nothing about photography or were strictly "amateurs" before enrolling. Yet today they are "making good" in industry, as news photographers, "on assignment" in Hollywood, in advertising agencies, in commercial and portrait studios and on every fighting front. Still others have won independence and a substantial income on their own. What they have done—you can do!

Train at Home or in Our N. Y. Studios

N. Y. I. offers you both sparetime training at home—or studio instruction in N. Y. Either way, every step of your course is personally supervised by experts. Available are courses in Commercial, Advertising, News, Fashion, Industrial, Portrait, Motion Picture and COLOR Photography.

YOU, Too, Can Qualify for Photographic Success!

Whether you think of photography merely as a hobby, for sparetime earnings, as a career with a future, write TODAY for our FREE Book, "Photography for Pleasure or Career." It shows how you can enjoy photography to the fullest—explains how you can make it pay richly, as have so many thousands of N. Y. I.-trained men and women. It tells why photography offers you more opportunities today than ever before. And, most important of all, it points out why photography means a sound, substantial future after the war, as well as immediate well-paid earnings.

A few of the thousands of N. Y. I. graduates making good from coast to coast.

NEW YORK INSTITUTE OF PHOTOGRAPHY
Dept. 117, 10 West 33 Street, New York 1, N. Y.

Training Men and Women for Photographic Success
Since 1910

IMPORTANT NEWS

for Men and Women in Service or in War Jobs

This training is available under government auspices to discharged veterans if qualified under the G. I. Bill.

If you are serving your country in the armed forces or in a war plant, the investment of today's time and dollars is to acquire knowledge that can mean tomorrow's well-paid career.

Photography offers you not only fascinating opportunity, but a sound, substantial future. News, advertising,

portrait and commercial photography are growing by leaps and bounds. They offer excellent salaries, work you will enjoy and an opportunity to be independent of bosses, hours and routine jobs.

Through N. Y. I.'s time-proven methods you can get the training you need at home, in camp, or in our New York Studios through resident training arranged to your convenience.

New York Institute of Photography
Dept. 117, 10 W. 33 St., New York 1, N. Y.



Gentlemen:

Please send me your FREE catalog. It is understood that no salesman will call.

Name

Address

City State

Please check course in which interested:

Regular Resident Course (in N. Y.)
 Home Study Training.

1 2 3 4 5 6 7 8

Only
COLOR PRINTS, Inc.
HOLLYWOOD, CALIFORNIA

... gives you the finest professional **8" x 10"** wash-off relief enlargements for the lowest price.

Original prints..... **\$3.50 ea**

DUPLICATE PRINTS, ONLY \$1.50 EACH (Matte Finish Paper, 75c Additional)

Made from 35 mm. Color Transparencies, or the 35 mm. area of a Bantam size, on quality semi-gloss paper.

* All Color Prints are printed on 8" x 10" paper stock unmounted, the actual image size being approximately 7" x 9". If preferred, 5" x 7" prints may be ordered at the same price.

Include 35c Mailing Charge with total order
Send us your Transparencies
TODAY!

Special CUSTOM Work

Prices on work to your own specifications, of critical quality—from any size cut film color transparency or "One-Shot" separation negatives to any size print—will be quoted on request. Prices start at \$15.00 for 8" x 10" or smaller—duplicates \$7.50.

Color Prints, Inc.
1709 NORTH VERNON AVENUE
HOLLYWOOD 27, CALIFORNIA

35 MM FILM \$1.00
Ultra Fine Grain

Developed, Printed and Vapored
Your 35 mm roll fine grain processed and each exposure enlarged to 3 1/4 x 4 1/2" on deckled-edge gloss or matte paper—\$1.00. We reload your cartridges with Eastman film for \$0.80

CENTURY PHOTO SERVICE
300 Century Building La Crosse, Wisconsin
24 Hour Service

WE WILL BUY

Small Cameras and Lenses of any size or type. Subject to examination here. Write full particulars and price wanted. We reply immediately.

PHOTO LENS CO., Inc.
140 West 32nd Street New York 1, N. Y.
Est. 1934 — Reference, Chase Nat'l Bank, N. Y. C.

ROLL DEVELOPED AND BRILLIANT 8 ENLARGEMENTS 8
2 TO 6 TIMES LARGER
FROM 8 EX. FILMS 116 OR SMALLER
DECLEK EDGE—FADE PROOF
12 EX. ROLLS 35c—16 EX. 50c—36 EX. \$1.00
REPRINT ENLARGMENTS 3c EACH
Mail Your Films TODAY to
ALDEN PHOTOS
94-6 Astor Sta., Boston, Mass.

25¢ COIN

So Near and Yet So Far

(Continued from page 54)

known fact that the farther away an object is from the camera, the paler and less contrasty it will appear because of intermediate masses of air and their light-diffusing effect upon the image. To improve the contrasts of pictures taken under such conditions, red filters and panchromatic films will have to be used. We stressed already the need for highest optical and mechanical quality of such filters, but another fact has to be mentioned here. Certain old-fashioned long-focus lenses are not corrected for the long-wave part of the spectrum and cannot give a sharp image if a red filter is used; such lenses are almost valueless for long-distance photography.

Since tele-shots will frequently be taken from high and wind-exposed vantage points, and since the effect of vibrations on the sharpness of the image grows proportionately with the focal length of the lens, special precautions will have to be taken to insure absolute stillness of the camera during exposure. A rigid support is, of course, a necessity (balustrade, window sill, wall, etc.), but if a tripod is being used, then the possibility of vibrations can be reduced even further by leaving the legs as short as possible and seeking shelter from wind in the lee of a building, a car, tree, or any other likely object. A check-up with a magnifier on the ground glass image will soon tell if the camera is actually still or not.

Turbulent air will mostly be found above hot objects, like chimneys, steamer smoke stacks, sun-drenched railroad tracks or tin roofs. Every car driver for instance knows that the air above the radiator of his car seems to vibrate, and small as such air eddies may be, the magnifying power of telephoto lenses would enlarge them enough to blur the picture. Here again, groundglass observation with a magnifier is essential, and if turbulence of air is proved by a wavy movement of the outlines of the image, a change of

camera position is indicated, since no other remedy exists.

The exposure of telephotographs should be on the short rather than on the long side to insure enough contrast, which can be improved further by prolongation of the development for another quarter of the regular time. And never should a teleshot be taken without an efficient and long enough sun shade, for diffused light entering the lens causes loss of contrast on the film, and preservation of contrast is one of the major problems in long-distance photography.

Ten Little Indians

Sir:

Here's news about your former editor:

Private Don M. Paul, is serving in the South Pacific with a photographic squadron in the 13th AAF, the air force that blasted Japanese air power from the skies over Guadalcanal to Truk in its north-westward drive.

Private Paul is a photo technician in a photographic squadron. He entered the army July 15, 1943, and left the United States for overseas duty in the South Pacific theater of operations on April 22, 1944, after attending AAF school of photography.

From Pearl Harbor until his induction he served as photographic advisor to photo officers of AAF Western Flying Command.

HEADQUARTERS,
13th AAF,
South Pacific.

As with every big family today, news of its members covers the globe. Other former editors of MINICAM are: Sgt. James Rosenthal who edits an Army camp paper in Kentucky; Lt. Nathaniel Rosenthal is an instructor in artillery in France; Lt. Fred Knoop produces training films in Hollywood; Major Will Lane is in combat military intelligence in the Central Pacific; Lt. Bob Parker is with Supreme Allied Headquarters, Press Relations, Belgium; Sgt. Henry Smith has not been heard from recently. He was in the South Pacific. Lt. Rothenberg is learning the Japanese language at Ann Arbor, Mich. Lou Croll is doing photography for the Navy, and George Rosenthal is back at work after a medical discharge.—Ed.



BE WISE SELL to Bass

Another Pome by Teacher Bass

Pupils, turn to me your ear
Pay attention, and you'll hear
How with pleasure you can earn
And a camera lesson learn.

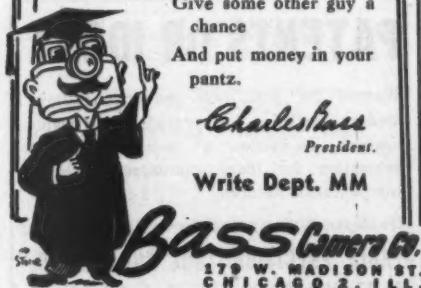
All you do is *sell* to me
The "camera pal" that used to be
That now sits idle on your shelf
Muttering to its lonely self.

Get it out where men are men,
Put the thing to use again.

Give some other guy a
chance
And put money in your
pantz.

Charles Bass
President.

Write Dept. MM



MIL-O

The Best in optical glass filters
and portrait lenses.

Miller Outcalt Company
207 SOUTH ALEXANDRA, LOS ANGELES 4, CALIFORNIA

35 M.M. FILM ULTRA FINE GRAIN

\$1

Developed,
Printed, Vaporated

FOR
DISCRIMINATING
CAMERA FANS

Your 35 MM roll ultra-fine-grain processed and vaporated. Each exposure enlarged to 3 1/4 x 4 1/2 on deckled-edged gloss paper, \$1. 36 Exposure Eastman Reloads, 50c Leaders Since 1920

RAY'S PHOTO SERVICE

La Crosse, Wis.
Dept. 23-D

ASK YOUR DEALER ABOUT
Wayne Color Prints

THE QUALITY COLOR PRINTS! SPEEDY
DELIVERY! DUPLICATES AT GREAT SAVINGS!

Write for names and addresses of WAYNE
Dealers in your community.

Wayne Color Prints

Wayne Studio & Photographic Color Laboratories

327 WASHINGTON ST. BUFFALO 3, N.Y.

**35mm. FILM
100 FEET**

Guaranteed fresh and fine quality
Anso Ultra-Speed Pan
Mailed on receipt **\$4.00**

Add 18c postage
Your order shipped same day your remittance
received by:

PARKO COMPANY Dept. M, Nunn Bldg.
Amarillo, Texas

Your cartridges loaded, only \$1.25 for 3.

PATENTS OR IDEAS

Wanted for post war production; have
modern facilities for precision and com-
mercial production of suitable items—
protection for ideas guaranteed. Liberal
compensation assured.

Holders of Army and Navy (E) and Star

EAGLE PRECISION TOOL AND DIE CO.

35-37 36th Street, L. I. City, N. Y.
ASTORIA 8-9330

HIGHEST
CASH
PRICES
PAID...
write!

**WE BUY --- USED
CAMERAS & LENSES**

Leica Cameras & Lenses
All Types of Color and
Black & White Cameras & Lenses — Telephoto
Lenses — 8 and 16 mm Movie
Cameras & Projectors (sound
and silent) NEEDED AT ONCE

CAPITAL CAMERA
EXCHANGE

1003 PENNSYLVANIA AVE. N.W. • WASHINGTON, D.C.

**35mm.
ROLLS**

DEVELOPED FREE

Pay only for what you get. Maximum charge 36 Exp.—
\$1.00 18 Exp.—60c. Our rate is 4c per print. If less
than 25 negatives are good we issue a credit per print.
Enlarges to 3 1/2 x 4 1/2" with Photo-Electric Exp. V. Photo
paper only. High class work guaranteed. D. K. 20.
Fine Grain Developing. 24 Hour Service Guaranteed.
SAVE MONEY. Send roll and \$1.00 today (Or sent
C. O. D. plus postage.) Over 25 Years Experience.

MINIPIX LABORATORIES
P. O. Box 1144, Dept. 91, CHICAGO
Copyright 1939, Minipix Laboratories

Book Reviews

By FRANK ZACHARY

Our Sons Will Triumph, by Jack Dixon.
Thomas Y. Crowell Co. Unpaged. \$2.50.

Described by the publishers as a "battle-hymn in pictures," this book is also an example of incisive photo-editing by a veteran newspaper man now a Lieutenant-Commander in the U. S. Coast Guard. The author mounts a moving tableau of the invasion around a 148-word excerpt from President Roosevelt's historic D-Day prayer, June 6, 1944, admirably capturing the mood of the text. There are 48 photographs, each a full-page reproduction, 7 3/4 x 10". Oscar Ogg's beautiful hand-lettered type is also appropriate to the spirit of this book, which is dedicated "To The Combat Photographers of the U. S. Coast Guard Serving in Every Theater of War."

Winston Churchill In The Mirror, by Rene Kraus. E. P. Dutton Co. 232 pages. \$2.75.

The first pictorial history of England's Prime Minister portrays the legendary career of one of the world's remarkable men. More than 200 photographs and cartoons follow Churchill up the ladder of fame, rung by rung. This visual record is accompanied by a running text which brushes in the gusty romance of Churchill's varied roles as war correspondent, soldier, statesman, and literary figure. The author, a well-known French-Australian journalist, compiled this photo-biography for the occasion of Churchill's 70th birthday, last November 30. The result is a warm and lively, though non-critical, appreciation of the great man's personality and genius.

First Of The Many, by Captain John R. (Tex.) McCrary and David E. Sherman. Simon and Schuster. 241 pages of text, 128 pages of photographs. \$3.75.

Superb photographs sharpen the thrills of an exciting narrative in this illustrated journal of action with the men of the Eighth Air Force—the first American invaders of Germany. Text and pictures take the reader into the briefing rooms, barracks and bars, and aloft in the heavy bombers for a vivid close-up of the effect of war on the young American heroes who are blasting Hitler's homeland. McCrary, former New York newspaperman, writes feelingly about these men because he shared ten missions with them as a photographer-gunner. Cross-indexed with the text are more than 200 photographs, many from official USAAF sources, the remainder by David Sherman, *Life* photographer formerly attached to the Eighth. Some unforgettable shots: The deep hatred burning in the eyes of Bombardier Mark

Mathis whose brother was killed in a raid over Germany; the drooping lines of Pilot Harold Stouze's haggard face and wilted leather jacket telling in a single picture all the physical and mental strain of a daylight raid; the mute belongings of a dead airman packed up and ready to be shipped to the next of kin. One of the best human-interest accounts of America's airmen to come out of the war, and new proof that the camera can "write" a powerful story.

1945: A Pictorial Calendar and Engagement Book. American Relief for France, Inc. \$2.00. Latin-American Year: A Pictorial Calendar for 1945, with photographs and captions, by Kurt Severin. Duell, Sloan and Pearce. \$2.00.

The French calendar contains fifty-three magnificent photographs which evoke the nostalgic spell of pre-war Paris. Only the inevitable pernod is lacking to complete the illusion that one is back under the shadow of the soaring Basilique du Sacre-Coeur, trudging over Montmartre's twisting cobblestones, loitering on the Seine's banks with the Sunday fishermen, browsing among the book-stalls along the Quai des Gds Augustins, and strolling through the Luxembourg Gardens after the rain. Four outstanding photographers donated the pictures in this series: Fred Stein, Hans Zellner, A. de Dienes, and F. Fonsagrives. All but ten of the pictures are by Stein, whose sensitive work is an education on how to photograph a city. The proceeds from the sale of this calendar will help feed and clothe the needy Frenchmen everywhere, which is all the more reason why you should have a copy.

In *Latin American Year*, the most famous photo-reporter of the lands below the Rio Grande offers a vibrant interpretation of the colorful contrasts which exist side by side in South America—the medicine man and the medical man, the oxcart and the railroad, the thatched hut and modern architecture. Photographer Severin has spent the past fifteen years focussing his camera on the everyday life of our 120,000,000 Good Neighbors to the South, and his pictures reveal his deep knowledge and understanding of the South American scene. Of special interest to photographers is the index page at the back, listing such practical information as the type of camera, lens, and film used for each of the fifty-five pictures, along with exposure data. Severin's captions are illuminating footnotes to his pictures, full of colorful lore and history-revealing facts about the land and its people.

Both of these handsome, and utilitarian, volumes have ring binders opening flat (a distinct advantage in picture books), and there is room to jot down morning, afternoon, and evening engagements for every day in the year.

MINICAM BOOK SERVICE will mail any of the above books on order, postage free. Make checks and money orders payable to MINICAM PHOTOGRAPHY, 22 East 12th Street, Cincinnati 10, Ohio.

These Books Will Help You Take Better Photographs

M-1—Graphic Graflex Photography. \$4.00

Edited by Willard D. Morgan and Henry M. Lester.

The authoritative work on the use of the large camera by 30 experts. 415 pp. 650 illustrations.

M-2—Elementary Photography 1.00

By C. B. Neblette, Frederick W. Brehm and Everett L. Priest.

The basic facts every amateur should know. 295 pp.

M-3—Loetens on Photographic Enlarging and Print Quality. 3.50

The definite work on the subject. 258 pp. By J. Ghislain Loetens.

M-4—Leica Manual 4.00

By Willard D. Morgan and Henry M. Lester.

The one-volume library on photography with the small camera. 547 pp.

M-5—Sports Photography 2.50

By Lee Wulff.

Good hunting for the sportsman with a camera. 182 pp.

M-6—Correct Exposure in Photography. 1.50

By Willard D. Morgan and Henry M. Lester.

How to use the photo-electric exposure meter for best results. 123 pp.

M-7—Kodachrome and Kodacolor From All Angles 6.50

By Fred Bond.

An expert guide for the amateur color worker. 232 pp.

ORDER BY NUMBER ON THE COUPON BELOW

MINICAM PHOTOGRAPHY
22 East 12th Street, Cincinnati 10, Ohio

Please send me postage-free the books numbered herewith:

Name
.....

Address
.....

City State
Check Money Order C. O. D.

35 MM FILM FINE GRAIN

developed and enlarged

• Any 36 Exposure Roll, including Uni-Memo, fine grain, developed chemically hardened and brilliantly enlarged to 31/4x4 1/4 on double weight glossy paper.

• 16 Exposure Roll, fine grain, developed and enlarged to 31/4x4 1/4 on double weight glossy paper.

• 3 EXP. RELOADS
GUARANTEED FRESH
50¢

• MONEY BACK IF NOT SATISFIED.
Send for free samples, and write for rates.

STANDARD FINE GRAIN SERVICES

DEPT. M12 BOX 392, GRAND CENTRAL
P. O. Y. C. N. Y.

SALONS AND EXHIBITS

★Follows P.S.A. Recommended Practices

Closing Date	Name of Salon	For Entry Blank, Write to	Number of Prints and Entry Fee	Dates Open to Public
Exhibit to see	★The P.S.A. 1944 Exhibition of Photography.			Chicago Historical Society, Chicago, Ill., December
Exhibit to see	First Annual Cranbrook Photographic Competition.			Cranbrook Academy of Art Exhibition Hall, Lone Pine Road, Bloomfield Hills, Michigan, December
Exhibit to see	Fourth Berkshire International Photographic Exhibition.			Berkshire Museum, Pittsfield, Mass., Dec. 1-31
Exhibit to see	★Thirteenth Annual Minneapolis Salon of Photography.			Minneapolis Institute of Arts, Minneapolis, Minn., Dec. 2-31
Exhibit to see	Twenty-eighth International Salon of The Camera Pictorialists of Los Angeles.			Los Angeles Museum, Exposition Park, Los Angeles, Calif., Jan. 1-31
Exhibit to see	Seventh Annual Springfield International Salon of Photography.			The George Walter Vincent Smith Art Museum, Springfield, Mass., Jan. 3-24
Exhibit to see	★Tenth Annual Des Moines International Salon of Photography.			Hall of Photography, Y. M. C. A., W. Fourth St., at Kaosaqua Way, Des Moines, Iowa, Jan. 1-22
January 18	★Twelfth Wilmington International Salon of Photography.	F. G. Tallman, Jr., Salon Secretary, Delaware Camera Club, 3024 DuPont Bldg., Wilmington, Dela.	4 \$1.00	Delaware Art Center Bldg., Wilmington, Dela., Feb. 4-28
January 20	★Oklahoma International Salon of Photography.	Salon Secretary, 525 N. W. 26th St., Oklahoma City 3, Okla.	4 \$1.00	Oklahoma Art Center, Oklahoma City, Okla., Feb. 1-18
January 30	★Fourth Chicago International Photographic Salon.	Eliz. H. Pence, Secretary, Chicago Historical Society, North Ave. and Clark St., Chicago 14, Ill.	4 \$1.00	Chicago Historical Society, Clark St. and North Ave., Chicago, March 3-31
February 5	★Eighth Annual Salon of Whittier Camera Club.	Rex Wakefield, Salon Chairman, P. O. Box 30, Whittier Calif.	4 \$1.00	Whittier Art Galleries, Whittier, Calif., Feb. 18-Mar. 4
February 13	★1945 Philadelphia International Salon of Photography.	Mrs. Francis J. Rumpf, Salon Secretary, 720 Spring Ave., Philadelphia 17, Pa.	4 \$1.00	Free Library of Philadelphia, Logan Circle, Philadelphia, Pa., March 3-25
February 20	★Second Wichita International Salon of Photography.	Mrs. Martin W. Leniz, Salon Director, 220 S. Holyoke Ave., Wichita 8, Kansas.	4 \$1.00	Wichita Art Museum, Wichita, Kansas, March 4-18
March 8	★Fifth Paducah International Salon of Photography.	E. Earl Curtis, Salon Chairman, P. O. Box 203, Paducah, Ky.	4 \$1.00	Hotel Irvin Cobb, Paducah, Ky., March 25-31
March 14	★Fifth St. Louis International Salon of Photography.	W. E. Chase, Room 500, Missouri Pacific Bldg., St. Louis 1, Mo.	4 \$1.00	City Art Museum, St. Louis, Mo., April 3-30

Kodak Bulletin

Reinstatements—Among the items which have recently been reinstated on a non-priority basis are:

The Eastman Diffusing Disk Holder, 5 x 7, for the Eastman Auto-Focus Enlarger. Price, \$4.27, plus tax.

The Kodak Lens Hood, Series VIII, for use in conjunction with other Series VIII supplementary lens attachments. Price, \$3.52, plus tax.

The U-11 Type A Kodachrome Filter for Daylight. U-11 Filters are adjustable to fit lenses (Ciné-Kodak lenses, primarily) the collar diameters of which are between $\frac{1}{2}$ -inch and 21/32-inch. Price, \$1.92, plus tax.

Production Accelerator—

Among the many new processes which have been devised for speeding the production of war materials, the latest is the surprisingly simple one of printing draftsmen's drawings directly on the metal to be fabricated. It involves two new chemical preparations—Kodak Layout Paint Primer and Kodak Layout Paint. The first prepares the metal surface to receive an image; the second contains a sensitizing agent. Both are simply sprayed on the metal with an ordinary

spray gun, under ordinary shop lighting conditions.

The drawing—on any transparent or translucent drafting medium—is placed in contact with the metal and held in position for an exposure of a few minutes under arc or mercury vapor lights. After that, the image is "developed" and washed, leaving a negative image of the drawing on the metal—a precise guide to the operators who bend, shear, or punch the material into its useful shapes. The images in the Kodak Layout Paint will even stand up under cutting torches up to the point where the molten metal cuts it away.



The FS-10-N—You may recall that there was once a Sound Kodascope FS-10—a very good projector of 16-mm. sound movies. And, for a really good projector, its price was modest. Well, practically all the FS-10s that Kodak could make have gone, since Pearl Harbor, to the armed forces, especially the Navy. A very few were shipped to high-priority civilian users.

Polished and refined by its Naval career, the FS-10 has emerged as the FS-10-N. And it is now available to civilian users who rate a priority of AA-5, or better, or who can obtain the okay of their regional WPB office for purchase under the liberal provisions of L-267. Your Ciné-Kodak dealer will be able to help you determine your status and facilitate your application.

Fundamentally, Sound Kodascope FS-10-N is the same smooth-running, high-efficiency, easy-to-operate projector that its predecessor was. The changes it incorporates are all in the interests of even greater user-convenience.

For Better Kodacolor Pictures

—There's a new booklet, "Picture Taking with Kodacolor Film" which will be worth vastly more than the dime it costs to anyone who uses—or hopes to use—Kodacolor Film. In simple terms, supplemented with illustrations and diagrams, this little book covers a variety of picture-making situations and how best to handle them in color. It makes exposure recommendations; it explains the very important differences between color and black-and-white photography.

This new book is a companion piece to that other very useful publication, "Picture Taking Out-



Snapshooter's friends

doors with Kodak Film." If you're not familiar with it, look it up. Aside from serving its basic function as a guide to picture making, it also manages to provide a brief course in the principles of photography.

At Your Service—For complete, specific, friendly information on all things photographic, keep in touch with your Kodak dealer or write directly to the Eastman Kodak Co., Rochester 4, N.Y.



Preparing to print

EASTMAN KODAK COMPANY



FILM STRETCHERS . . . KODAGUIDES help to make every exposure count

ARMED with the proper dial-type Kodaguide, you quickly get direct-exposure readings. You hit exposures on the nose—get more good ones—stretch every roll of film. This time of year, when you're taking pictures indoors at night, or outdoors in tricky winter light, you'll find these Kodaguides particularly helpful:

Outdoor Kodaguide for Kodak Films: Dial calculator for Kodak Verichrome, Super-XX, Plus-X, and Panatomic-X Roll Films (including miniature sizes) and Film Packs. \$10.

Kodak Home Lighting Guide: Dial exposure calculator for Kodak Super-XX Film under ordinary home illumination with still and movie cameras. \$10.

Kodachrome Outdoor Guide, 35-mm. and Bantam: Gives shutter speeds and lens openings for various daylight conditions; for K135 and K828 Kodachrome Film. Dial type. \$10.



ALSO AVAILABLE

Kodacolor Exposure Guide	\$.10
Ciné-Kodak Outdoor Guide10
Ciné-Kodak Indoor Guide10
Kodachrome Indoor Guide, 35-mm. and Bantam10
Kodak Outdoor Filter Guide10
Wratten Filter Guide10
Eastman Paper Kodaguide10
Kodak Film Guide10
Contrast Viewing Kodaguide25
Kodak Densiguide	1.00



AND—KODAK DATA BOOK

These comprehensive, fact-packed books give you the answer to most picture-making question. Clear, concisely indexed. (Many are punched for easy insertion in your Kodak Reference Handbook.) Eastman Kodak Company, Rochester 4, N.Y.

Kodak

UR KODAK

.10
.10
.10
.10
.10
.10
.10
.10
.10
.25
1.00

BOOK

act-packed
o most
ar, conch
are
n in
.) East
r 4, N.